EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP. WINDOWS OPERATING SYSTEMS ANTITRUST LITIGATION	* * *	MDL-1332

*****

ORDER NO. 1
Initial Conference

1. **Initial Conference.** All parties shall appear for a conference on the 16th day of June, 2000, at 9:30 a.m., United States Courthouse, Courtroom 5A, 101 West Lombard Street, Baltimore, Maryland.

   (a) **Attendance.** To minimize costs and facilitate a manageable conference, parties are not required to attend the conference, and parties with similar interests are expected to agree to the extent practicable on a single attorney to act on their joint behalf at the conference. A party will not, by designating an attorney to represent its interests at the conference, be precluded from other representation during the litigation; and attendance at the conference will not waive objections to jurisdiction, venue, or service.

   (b) **Service List.** This order is being mailed to the persons shown on Attachment A, which has been prepared from the list of counsel making appearances with the Judicial Panel on Multidistrict Litigation. Counsel on this list are requested to forward a copy of the order to other attorneys who should be notified of the conference. A corrected service list will be prepared after the conference.

   (c) **Other Participants.** Persons who are not named as parties in this litigation but may later be joined as parties or are parties in related litigation pending in other federal and state courts are invited to attend in person or by counsel.

2. **Purposes; Agenda.** The conference will be held for the purposes specified in Fed. R. Civ. P. 16 and 26(f). A tentative agenda is appended as Attachment B. Counsel are encouraged to advise the court on or before June 12, 2000 of any items that should be added to the agenda.

3. **Preparations for Conference.**

   (a) **Procedures for Complex Litigation.** Counsel are expected to familiarize themselves with the Manual for Complex Litigation, Third, and be prepared at the conference to suggest procedures that will facilitate the just, speedy, and inexpensive resolution of this litigation.

3

(b) **Initial Conference of Counsel.** Before the conference, counsel shall confer and seek consensus to the extent possible with respect to the items on the agenda and any items they believe should be on the agenda. The court designates Stanley Chesley and David Tulchin to arrange the initial meetings of plaintiffs' and defendants' counsel, respectively. After those initial meetings a joint meeting of all counsel should be held.

(c) **Preliminary Reports.** Counsel will submit directly to chambers by June 12, 2000, a brief written statement indicating their preliminary understanding of the facts involved in the litigation and the critical factual and legal issues. These statements will not be filed with the clerk, will not be binding, will not waive claims or defenses, and may not be offered in evidence against a party in later proceedings.

(d) **List of Pending Motions.** Counsel's statement shall list all pending motions.

(e) **List of Related Cases.** Counsel's statement shall list all related cases pending in state or federal court and their current status, to the extent known.

(f) **List of Affiliated Companies and Counsel.** To assist the court in identifying any problems of recusal or disqualification, a list of all companies affiliated with the parties and all counsel associated in the litigation should be attached to counsel's statement.

4. **Interim Measures.** Until otherwise ordered by the court:

(a) **Admission of Counsel.** Attorneys admitted to practice and in good standing in any United States District Court are admitted pro hac vice in this litigation. The provision of Local Rule 101.b requiring a party represented by an attorney who has been admitted pro hac vice to also be represented by an attorney who has been formally admitted to the Bar of this court is hereby suspended.

(b) **Pleadings.** Each defendant is granted an extension of time for responding by motion or answer to the complaint until a date to be set at the conference.

(c) **Pending and New Discovery.** Pending the conference, all outstanding disclosure and discovery proceedings are stayed and no further discovery shall be initiated. This order does not (1) preclude voluntary informal discovery regarding the identification and location of relevant documents and witnesses; (2) preclude parties from stipulating to the conduct of a deposition that has already been scheduled; (3) prevent a party from voluntarily making disclosures, or responding to an outstanding discovery request under Rule 33, 34, or 36; or (4) authorize a party to suspend its efforts in gathering information needed to respond to a request

under Rule 33, 34, or 36. Relief from this stay may be granted for good cause shown, such as the ill health of a proposed deponent.

(d) **Preservation of Records.** Each party shall preserve all documents and other records containing information potentially relevant to the subject matter of this litigation. Each party shall also preserve any physical evidence or potential evidence and shall not conduct any testing that alters the physical evidence without notifying opposing counsel and, unless counsel stipulate to the test, without obtaining the court's permission to conduct the test. Subject to further order of the court, parties may continue routine erasures of computerized data pursuant to existing programs, but they shall (1) immediately notify opposing counsel about such programs and (2) preserve any printouts of such data. Requests for relief from this directive will receive prompt attention from the court.

(e) **Orders of Transferor Courts.** All orders by transferor courts imposing dates for pleading or discovery are vacated.

(f) **Suspension of Filings.** Counsel are discouraged from filing any pleadings or motions until after June 16, 2000.

5. **Later Filed Cases.** This order shall also apply to related cases later filed in, removed to, or transferred to this court.

Dated: May 3, 2000

J. Frederick Motz
United States District Judge

Attachments: A (Service List)
B (Agenda)

EXHIBIT 2

Filed Under Seal

EXHIBIT 3

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE CITY AND COUNTY OF SAN FRANCISCO

COORDINATION PROCEEDINGS	)
SPECIAL TITLE (Rule 1550(b))	) J.C.C.P. No. 4106
	) CLASS ACTION
MICROSOFT I - V CASES	)
	)

2025 DEPOSITION OF THOMAS BURT

CONFIDENTIAL

November 16, 2000

(100077)

page, on Page 3 of 15, "August 12, 1997. DOJ CID VXtreme and VDOnet."

Do you see that one?

Q. Yes.

A. That one is directly related. The Government was allowed to expand their case to include allegations relative to Real Network, which is the successor name of Progressive Network. So that notice is related to topics that the Government was interested in investigating that had been melded into the DOJ case.

And there is the Office CID that was served -- well, the Office CID that was served in July of 1999 -- I'm sorry -- the retention notice, the July 1999 retention notice, related to the Office CID. That retention notice came out after most of the trial was complete.

Q. Do you know what that particular Office CID pertained to? Was that the DOJ case?

A. No. I wouldn't say that that -- the Office CID pertained to an investigation that is ongoing by a number of state attorneys general into issues related to Microsoft Office. It was served just -- what happened was the state attorneys general included in their complaint that that was part of

e-mail?

MR. ROSENFELD: Same objection.

If there is a nonprivileged response you can give, otherwise it is privileged.

THE WITNESS: With respect to that instruction I can -- and as I understand the question, I can tell you that as of today, I don't believe there has been any change in Microsoft's policy. I can tell you that based on the e-mail collections that we have done, I am confident that there has been no change in the practice at Microsoft.

BY MR. HERHOLD: (Continuing)

Q. When you say "collections done," in association with the present litigation?

A. Correct.

Q. Okay. Were there any efforts or directives from Microsoft following the DOJ case to transact less business by e-mail?

MR. ROSENFELD: Same qualification on privilege.

THE WITNESS: None whatsoever that I am aware of or that I have observed. It is the central nervous system of the company.

BY MR. HERHOLD: (Continuing)

Q. How does one find out when a custodian has been

department. You get the manager of the department and their direct reports. You have got that whole group. They are under retention.

The nature of e-mail is such that that means you have retained virtually all the relevant information for that department. Because if it is of any decision-making consequence at all, it gets copied to one of those people and probably to many of those people. And in sweeping through and pulling out that information, you would have captured all of that.

I think that is a complete answer.

Q. Okay. You testified that in '96 you sent out these notices to go back to the old method, essentially.

What was the old method? Were there some written procedures for the preservation of documents?

A. Just to be clear, I never said "old method." You said that in your question. I said "regular practice."

Q. Let's use your language, not mine.

A. I don't know what the old method was, because whatever that old method was predated my joining the company.

The ordinary practice to which people were

encouraged to return to was to retain information that they needed to do their job. And it was a rule of thumb that they should retain things that -- things that were older than six months old, they should think about deleting. All of that was subject to determination on a department or group basis working with managers. All of that was subject to specific obligations to retain certain categories of information that should be discussed within each group, such as tax or finance or employment information. And all that was subject to any other specific retention instructions received from Legal.

Q. Do the groups regularly seek LCA's advice with regard to retention practices?

A. I'm not sure by the question what is meant by the term "regularly," but certainly from time to time, yes.

Q. And I'm not asking about in conjunction with specific litigation. I'm talking about overall procedures on a day-to-day basis.

Your testimony is from time to time they do consult with LCA on those procedures?

A. On document retention procedures?

Q. Yes.

documents from the subsidiary and other sources, which we did, and I think we found a couple things that got produced, or else we showed them that we had already produced some things in the collection that they had. I can't remember which one it was. But I don't recall that they asked for any specific relief relative to that testimony.

Q. How about in any other case that you are familiar with? Have the plaintiffs ever raised the issue whether or not Microsoft took adequate measures to preserve evidence?

A. When you say "raise the issue," we have been asked about what we have done in the past. And, to my knowledge, in every case the plaintiffs have been satisfied with the processes and procedures we have employed. I can't remember a case where a question has been raised whether documents have been destroyed or, you know, improperly destroyed or not retained that should have been retained other than the instance of Ms. Reinkel's testimony. That is the only one I know of.

Q. Are you aware of any instances in the last five years where documents have been improperly destroyed at Microsoft?

A. I am not. To my knowledge, Microsoft documents

have been retained to a fault. Everybody at Microsoft retains stuff for a long, long, long time. Despite what we described earlier as the document retention practice, that the general rule at Microsoft is that that practice is ignored and people just keep everything. But I -- that is my understanding of the general practice.

My specific answer is I am not aware of any instance other than Ms. Reichel's testimony of any -- and I don't know whether that is true or not. But I don't know of any instance where anybody destroyed or deleted or got rid of any information that Microsoft had any obligation to retain.

MR. HERHOLD: Thank you.

No further questions.

Go ahead.

MR. GRIFFIN: If we can just take a lunch break first.

MR. ROSENFELD: You mean no further questions on the retention side?

MR. HERHOLD: Correct. Just with this caveat: When we get into Caldera there may be some overlapping, but I don't have a whole series of questions on retention.

C E R T I F I C A T E

I, Amy Quenelle, a Certified Shorthand Reporter and Notary Public for the State of Washington, do hereby certify that THOMAS BURT personally appeared before me at the time and place mentioned in the caption herein; that the witness was by me first duly sworn on oath and examined upon oral interrogatories propounded by counsel; that said examination, together with the testimony of said witness, was taken down by me in stenotype and thereafter reduced to typewriting; and that the foregoing transcript, Pages 1 to 219, both inclusive, constitutes a full, true, and accurate record of said examination of and testimony by said witness, and of all other oral proceedings had during the taking of said deposition, and of the whole thereof.

Dated at Portland, Oregon, this 28th day of November, 2000.

Amy Quenelle

WA. CSR No. QU-EN-EA-E335RA

EXHIBIT 4

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP. ANTITRUST LITIGATION,	**MDL Docket No. 1332**
This Document relates to:	**Hon. J. Frederick Motz**
Burst.com, Inc. v. Microsoft Corp.,	
Civil Action No. JFM-02-CV-2952	

DECLARATION OF DOUGLAS N. BROWN IN SUPPORT OF MICROSOFT CORPORATION'S OPPOSITION TO BURST'S MOTION TO COMPEL

I, Douglas N. Brown, make the following declaration in support of Microsoft Corporation's Opposition to Burst's Motion to Compel.

1. I am over 18 years of age and have personal knowledge of the matters set forth herein, except as indicated. I have been a Microsoft employee since April 10, 2000. From November 2000 to present, I have served as a Backup Operations Manager in the Operations and Technology Group. My group provides computer back-up and restore services for Microsoft.

2. There are more than 963 file servers at Microsoft in over 163 different sites. There is no record which tracks which employees' files are located on which of these 963 file servers. While the primary storage place for employees has been their personal computer, employees can also choose whether or not to store some records on a file server.

3. At his or her discretion, an employee of Microsoft may request to save files to a file server as a backup to the documents on his or her computer. If such a request is made, the employee will be assigned to a particular file server depending upon the particular length of time that employee would like files to be saved. Employees may have files saved to multiple servers

and both these servers and the physical machine associated with each server may change over time.

4. To my knowledge, very few employees save their .pst e-mail files to a file server. Most employees place their .pst files on the hard drives of their laptops or computers. Company policy is that e-mail .pst files should not be stored on file servers. As of at least April 2000 the guideline used by Operations and Technical Group (OTG) excluded files with .pst extensions from the backup process. Since at least April 2000 forward any file with a ".pst" extension – indicating it is an e-mail document – was automatically excluded from the back-up tape process, via the file exclusion utility native to the backup software.

5. Most file servers at Microsoft are backed up on a rotating basis for disaster recovery purposes only. Every 28 days, a full, snapshot back-up of each server is made and sent off-site to storage. These are the back-up tapes referred to above. These servers are also backed up daily on a partial (differential) basis, meaning each day a back-up is made that records only those changes from the prior day. Once a week each scheduled file server resource is also fully backed up. These daily differential and weekly full tapes are recycled and made available for backing up of new information once the monthly tape is made and sent off-site. Substantial duplication exists from one monthly back-up tape to another because the information on the file servers tends to remain largely the same over time. In addition, given this process, if a particular document was first saved to a file server in a month but deleted before the monthly back-up tape was made, no record of that document would remain on the month's off-site back-up tapes.

6. In order to identify and locate individual files from a file server back-up tape, a catalog of the tape must be currently available, restored or recreated. There is no way to know what is on each back-up tape until it is cataloged. This catalog lists the directories of the files on the file server back-up tape and the individual files within each directory. There may be hundreds or thousands of directories listed in a single catalog of a file server back-up tape and hundreds of thousands of files within each directory. A catalog does not list files shares or files by employee name. In order to do a software search of a catalog for a particular file within a

directory, the searching party would need to know the exact name of the file. If a searching party does not know the exact name of the file, he or she would need to manually review the catalog, directory-by-directory and file-by-file within each directory, to identify a file name based upon information provided by the person who submitted the file to the server concerning distinguishing words in the file title. Even within a single server, an employees' files may be spread over many directories. Automated searching is not practical for file server back-ups because the underlying documents do not contain custodian names. This process can take hours or days.

7. Catalogs of file server back-up tapes are kept for 90 days. and are then recycled.

8. Catalogs of file server back-up tapes older than 90 days but created after April 2000 are not currently available but can be restored or recreated. The restoration of such tape catalogs can take up to 4 hours per catalog.

9. Catalogs of back-up server tapes covering periods prior to April 2000 must be recreated rather than merely restored. Recreating a catalog of single file server back-up tape can take up to 8 hours per tape, depending on the amount of data on each tape. Catalogues must be created tape-by-tape by loading the tape into a tape drive and performing the cataloging routine.

10. Once an employee's material is identified from a catalog, the individual documents must be restored from the back-up tapes. This process can take up to another 8 hours to complete, depending on the size of the file that is to be restored.

11. In April 2000, Microsoft changed the software, hardware, and tape medium relating to the back-up of its file servers. In order to recreate a catalog for a file server back-up tape created before April 2000, Microsoft would first need to locate and obtain access to the software and hardware capable of recreating such catalogs.

12. Approximately 13,000 back-up tapes are created and stored off-site each year from the file servers located in Redmond, Washington. There are currently 160,000 file server back-up tapes in off-site storage for the Redmond file servers.

13. For the period from September 1999 through March 2001, there are approximately 25,000 back-up tapes from Redmond-located file servers alone and each tape contains approximately 50 gigabytes of data. Based on these estimates, there are approximately 1,250 terabytes of information on back-up tapes for the period September 1999 through March 2001. In my opinion, just recreating the catalogs for these 25,000 tapes could take approximately a total of 200,000 hours of computer time. As stated above, manually reviewing each catalog could then take hours or days per tape.

14. In order to locate e-mail files on a back-up tape that a particular employee might have saved on a file server during the period September 1999 through March 2001, the employee would first have to identify the particular server or servers that their e-mail files were stored on for that period. Following such identification of the server(s), a catalog would have to be restored or recreated depending upon the date of the back-up tape. Following the restoration or recreation of such catalog, a manual search would need to be conducted for the particular name of the file or, if such exact name were not known, a manual search would need to be conducted of the directories and files within such directories.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

DATED at Monday this 11th day of August 2003.

Douglas N. Brown

EXHIBIT 5

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP.)
ANTITRUST LITIGATION.)
)
this Document relates to:)
Burst.com, Inc. Vs.)
Microsoft Corp.,)
)
Civil Action No. JPM-02-cv-2952)

VIDEOTAPED 30(b)(6) DEPOSITION UPON ORAL EXAMINATION

OF

MICROSOFT CORPORATION

(DOUGLAS BROWN)

COPY

HIGHLY CONFIDENTIAL

9:04 A.M.

SEPTEMBER 30, 2003

925 FOURTH AVENUE, SUITE 2900

SEATTLE, WASHINGTON

DIANE MILLS, CCR #2399

09:14:04AM understand what it says, and -- or the specification, excuse me. And again, I don't believe that we've established that there is a decision not to map custodians to servers.

Q. (BY MR. HOSIE) All right, sir. And if you could read aloud Specification 3, please.

A. "Microsoft's decision to destroy file catalogues created for the backup file server tapes."

Q. And are you knowledgeable about the specification you just read, sir?

A. I'm knowledgeable about that specification, although I don't believe that we're destroying file catalogues.

Q. All right, Mr. Brown. When you met with Ms. Harris to prepare yourself yesterday, I'm sure she showed you documents?

A. Yeah, she showed me two.

Q. What did she show you, please?

A. She showed me this document -- excuse me, she showed me three. She showed me this document and she showed me another document, it was a document that discussed various policies. And then there was another document that discussed -- or that was my -- what's the word, not deposition but my --

MR. AESCHBACHER: Declaration?

A. Declaration, excuse me. Those are the documents

09:15:14AM 1 that I can remember seeing yesterday.
09:15:16AM 2 **Q.** (BY MR. HOSIE) The third document mentioned was
09:15:18AM 3 your declaration. That's the declaration you executed on or
09:15:23AM 4 about August 11th in connection with a First Motion to
09:15:25AM 5 Compel?
09:15:26AM 6 **A.** Yes.
09:15:26AM 7 **Q.** All right, sir.
09:15:28AM 8 The second document you mentioned, I'm showing you
09:15:31AM 9 a document captioned Corporate Backup Services. I'll ask
09:15:33AM 10 you, is that the document?
09:15:34AM 11 **A.** Yes.
09:15:39AM 12 **Q.** All right, sir. I'd like you to summarize for me
09:15:42AM 13 what you did to educate yourself to testify here today.
09:15:48AM 14 **A.** Let me know if I go into too much detail.
09:15:50AM 15 **Q.** Have at it, sir.
09:15:52AM 16 **A.** Okay. So to prepare for this, as we discussed
09:15:56AM 17 earlier I met with Susan and had several voicemail -- or
09:16:01AM 18 voice conversations with Susan. Also met with my team who
09:16:06AM 19 manages the operation of OTG's backup system, and discussed
09:16:11AM 20 the various aspects of how we operate the backup system.
09:16:16AM 21 Talked to the Messaging and Collaboration Team which owns the
09:16:20AM 22 exchange servers, talked to them about their policies and
09:16:26AM 23 practices. Talked to the people who manage the operations of
09:16:29AM 24 the file server service, it's a service that we provide.
09:16:34AM 25 Talked to them about their policies and practices. Talked to

09:49:25AM **Q.** You're referring to the Corporate Backup Services document?

09:49:27AM **A.** Correct.

09:49:27AM **Q.** And I'll mark that in a minute, Mr. Brown.

09:49:28AM So the source for your statement, "Company policy is that e-mail .pst files should not be stored on file servers" was the Corporate Backup Services document?

09:49:32AM **A.** Correct.

09:49:35AM **Q.** Was there any other source for that statement?

09:49:38AM **A.** Yes.

09:49:41AM **Q.** What was the other source?

09:49:41AM **A.** May I see this document? There's a link to a document. (Witness reviewing document.)

09:49:43AM **Q.** Have you found the link, sir?

09:50:20AM **A.** I have.

09:51:19AM **Q.** What is the link?

09:51:21AM **A.** It's this link right here on the bullet point.

09:51:21AM **Q.** Could you read it aloud into the record, please?

09:51:22AM **A.** Sure. http://team/sites/fileserver/Lists/ITG%20File%20Server%20Policies%20%20Guidelines/DispForm.aspx?ID=4.

09:51:24AM **Q.** Thank you. And what did you learn from when you were in that site?

09:51:26AM **A.** I learned that the Messaging and Collaboration Team had a document instructing employees who request file shares

09:52:07AM

09:52:09AM

09:52:12AM

09:52:13AM

09:52:17AM

to not save PST files and OST files to file shares.

Q. And could you tell when that guidance was first given from the site, sir?

A. No.

Q. Do you know when that guidance was first given?

A. From the information I've been able to gather preparing for this preparation, the best information I can find is in the '94 to '96 time frame.

Q. As you mentioned earlier today?

A. Correct.

Q. We'll get to that in a minute, sir.

Did you come to have an understanding of why company policy is that e-mail PST files should not be stored on file servers?

A. I have not been able to come to an understanding of why that was written the way it was.

Q. The question was actually a little different. Not why it was written the way it was, but why is that the company policy, sir? What's your understanding?

A. I don't understand that it's Microsoft policy, I understand that it's a policy recommendation from the File Services Team.

Q. And what is the File Services Team?

A. I'm sorry, that's what they were called at the time. The Messaging and Collaboration Team.

9:53:45AM 1 **Q.** Okay. And what was your understanding of why the
09:53:49AM 2 Messaging and Collaboration folks gave the guidance that
09:53:52AM 3 people shouldn't archive e-mails on file servers? Why did
09:53:55AM 4 they say that?
09:53:59AM 5 MS. HARRIS: And I'll object on foundation. He
09:54:01AM 6 hasn't identified that he has an understanding.
09:54:02AM 7 **Q.** (BY MR. HOSIE) Well, sir, if you don't know just
09:54:04AM 8 say "I don't know."
09:54:05AM 9 **A.** I don't know why they wrote that.
09:54:06AM 10 **Q.** Well, did you ask that question in any of your
09:54:10AM 11 various conversations to prepare yourself to testify here
09:54:12AM 12 today?
9:54:13AM 13 **A.** Yes.
09:54:13AM 14 **Q.** And whom did you ask?
09:54:15AM 15 **A.** The people I listed earlier in the Messaging and
09:54:20AM 16 Collaboration Team.
09:54:20AM 17 **Q.** And what did they tell you?
09:54:22AM 18 **A.** They told me that that document was from the '94 to
09:54:28AM 19 '96 time frame and there was no one -- there's no one in that
09:54:33AM 20 group today that was here at that time, so that document was
09:54:43AM 21 memorializing past policies.
09:54:48AM 22 Did that answer your question?
09:54:50AM 23 **Q.** Yes, thank you.
09:54:51AM 24 And so they didn't really know, they just said,
9:54:55AM 25 hey, it's always been that way at least since '94 to '96?

9:56:06AM **A.** I don't.

09:56:07AM **Q.** And nor could you learn in any of your multiple conversations to educate yourself for your testimony today?

09:56:11AM **A.** I have not been able to learn that, although we've tried.

09:56:14AM

09:56:19AM

09:56:19AM **Q.** Isn't it true, sir, that the policy of not archiving e-mails on a file server originated with Microsoft's lawyers?

09:56:23AM

09:56:26AM

09:56:28AM **A.** I don't know that.

09:56:43AM (Deposition Exhibit No. 3 was marked for identification.)

09:56:44AM

09:56:44AM **Q.** (BY MR. HOSIE) Mr. Brown, you've referred several times to the Corporate Backup Services document, and I'd like to now mark that as Exhibit 3.

9:56:47AM

09:56:49AM

09:56:59AM I've placed before you what's been marked as Exhibit 3, sir. It's captioned Corporate Backup Services. The content owner is Doug Brown. That would be yourself?

09:57:01AM

09:57:05AM

09:57:08AM **A.** Yes.

09:57:09AM **Q.** And was this last modified March 14, 2003?

09:57:15AM **A.** Appears to be.

09:57:15AM **Q.** And you're the author of this document, are you not, sir?

09:57:19AM

09:57:20AM **A.** Correct. I posted this document to the Web site.

09:57:24AM **Q.** All right, sir. If you could turn in to the page that has the Bates stamp production number ending with the

9:57:29AM

09:59:19AM 1 **Q.** Yeah. Prior to reading this, sir, did you hear
09:59:21AM 2 from anyone that you talked to that it was due to legal
09:59:24AM 3 issues that PST files should not be stored on servers that
09:59:28AM 4 are subject to backup?
09:59:34AM 5 **A.** Prior to reading this when I referenced the
09:59:38AM 6 document in my Corporate Backup Services when I posted it?
09:59:45AM 7 No. That's why I referred to this -- I referred to this
09:59:49AM 8 because that was the basis of our policy of our file
09:59:54AM 9 exclusion.
09:59:54AM 10 **Q.** The basis of your file exclusion was certain legal
09:59:58AM 11 issues?
09:59:58AM 12 **A.** Was --
10:00:00AM 13 MS. HARRIS: Objection. He's testified that this
10:00:01AM 14 document was the basis of his file exclusion.
10:00:04AM 15 **Q.** (BY MR. HOSIE) My question is about the language
10:00:07AM 16 in Item 1, Mr. Brown.
10:00:09AM 17 **A.** The basis of our file exclusions also goes back to
10:00:14AM 18 '94 to '96 time frame that when the managed service was
10:00:23AM 19 founded, started, that the file exclusion had been in place
10:00:29AM 20 since then. And my understanding was because the files --
10:00:35AM 21 because the PST files were not stored on the file servers,
10:00:38AM 22 that there was no need to back them up.
10:00:43AM 23 **Q.** I see. So now you're saying that there's no need
10:00:46AM 24 to back up PST files because PST files were not stored on the
10:00:50AM 25 server subject to backup? Is that what you're saying?

10:00:53AM **A.** I'm saying that because share owners were
10:00:58AM instructed not to save PST files to the file servers, there
10:01:03AM was no need to consume the resources to back them up.
10:01:11AM **Q.** And how did you come to understand the point you
10:01:14AM just made?
10:01:17AM **A.** Through asking the people that were here -- the
10:01:20AM same people I referred to earlier, that people that were here
10:01:23AM at the time and trying to go back and find out in my
10:01:29AM preparation for this meeting, you know, the chronological
10:01:32AM order of things.
10:01:32AM **Q.** Uh-huh. And so you learned in your inquiries that
10:01:39AM since people have been told not to store e-mails on servers,
10:01:43AM we have no need to back up PST files for those servers; is
10:01:48AM that accurate?
10:01:51AM **A.** If I can paraphrase what you said, that because the
10:01:56AM share owners had been requested to not save the files to
10:02:02AM their -- to the file server, there was no need to back them
10:02:07AM up, no need to have the functionality to back them up.
10:02:10AM **Q.** All right, sir. And what were the legal issues
10:02:13AM that resulted in this guidance being given?
10:02:16AM **A.** I don't know that.
10:02:17AM **Q.** Did you ask anyone in your many conversations to
10:02:20AM prepare yourself?
10:02:21AM **A.** I asked to try to find out what that was, and I was
10:02:23AM unable to find anybody who could answer that question.

10:02:26AM **Q.** Do you know who made the decision that resulted in this guidance that due to legal issues, they should not store archived e-mails?

10:02:36AM **A.** I do not.

10:02:37AM **Q.** Do you know when that decision was made?

10:02:40AM **A.** I don't know that the decision -- I don't know that a decision was made. I know from the research that I've been able to do back in the '94 to '96 time frame, that that's when the file service came to be, and that it's been that way since the file service came to be.

10:03:02AM **Q.** Since what date?

10:03:05AM **A.** In --

10:03:06AM **Q.** Be as precise as you can, please.

10:03:09AM **A.** Being -- saying '94 to '96 is as precise as I can be.

10:03:13AM **Q.** Okay, but it's -- you're confident in saying that after early '96 there were no PST files maintained on backup tapes?

10:03:25AM MS. HARRIS: Objection. That's not what he's testified to.

10:03:28AM **Q.** (BY MR. HOSIE) That's my question.

10:03:28AM **A.** That's not what I'm saying.

10:03:30AM **Q.** Okay.

10:03:30AM **A.** I'm saying that the -- in the '94 to '96 time frame, that as far back as then, people were requested not to

10:14:36AM backup tapes; correct?

10:14:40AM **A.** If the software was operating the way that it was

10:14:44AM configured.

10:14:44AM **Q.** And if in fact we do find PST files on file server

10:14:50AM backup tapes after 1996, what does that tell you, sir?

10:14:54AM **A.** That tells me that people saved files to a file

10:14:58AM server and that the backup routine did not exclude them.

10:15:01AM **Q.** And why would the -- give me the reasons why the

10:15:04AM backup machine would not exclude, say, e-mails vintage 1996,

10:15:09AM late 1996.

10:15:16AM **A.** Sounds brutal, but it sounds like a poorly coded

10:15:20AM backup product.

10:15:21AM **Q.** Sir, how sure are you that the e-mail backup

10:15:26AM exclusion was in effect from 1994 through 1996 forward?

10:15:32AM **A.** I'm very sure.

10:15:35AM MR. HOSIE: Why don't we take a brief break.

10:15:38AM VIDEO OPERATOR: The time is 10:15 a.m. We'll be

10:15:41AM taking a break in testimony.

10:29:26AM (Recess taken.)

10:29:29AM VIDEO OPERATOR: The time is 10:28 a.m. We are now

10:29:33AM back on the record.

10:29:38AM (Deposition Exhibit No. 4 was marked for

10:29:39AM identification.)

10:29:39AM **Q.** (BY MR. HOSIE) Sir, I'd like to show you what I've

10:29:41AM marked as Exhibit 4. I apologize for the heft of this

10:54:39AM mail files are still there on the exchange server. They
10:54:43AM don't purge mail after 28 days.
10:54:44AM **Q.** I understand. So let's say I'm Steve Ballmer and
10:54:49AM it's the summer of 2000, and I said, you know, goddamn it, I
10:54:52AM remember a very important e-mail exchange I had two years ago
10:54:57AM but I've deleted it from my hard drive, and he calls you and
10:55:01AM says, Doug, I remember these e-mails, it has to do with Intel
10:55:05AM and I really need you guys to find those for me. Could you
10:55:09AM do that?
10:55:10AM **A.** I think more credibly, I'd have to say no to Steve
10:55:18AM Ballmer.
10:55:18AM **Q.** Now, if Steve Ballmer came to you and said, you
10:55:21AM know, I remember a Word document that I backed up to a file
10:55:23AM server two years ago and I really need the backup, deleted it
10:55:29AM from my e-mail, could you find that for him?
10:55:31AM **A.** It depends on the retention time selected by the
10:55:34AM server owner when they requested the backup.
10:55:36AM **Q.** Well, say if it related to --
10:55:38AM **A.** Probably not.
10:55:39AM **Q.** If it related to finance where there was a six-year
10:55:41AM schedule.
10:55:42AM **A.** If the server that he saved his file to had a
10:55:46AM retention time of -- within the window that he was asking
10:55:50AM for, then I would expect to be able to restore it for him.
10:55:52AM **Q.** Why is e-mail treated differently, sir?

10:55:56AM **A.** I don't know why e-mail is treated differently. I know the backups are the single biggest volume cost expense that we do.

10:56:03AM **Q.** Now, you've mentioned that business groups can own servers. Is that the vernacular, they own a server?

10:56:08AM **A.** Correct.

10:56:11AM **Q.** And so you maintain records, I'm sure, of which business groups own which servers?

10:56:15AM **A.** There is a database that tracks which business units own which servers.

10:56:18AM **Q.** And what kind of information would it reflect?

10:56:19AM **A.** Where it's located, what model device it is, what rack unit it's in, what location, what coordinates in the data center it's in, what software or what operating system it runs on, who the server owner is, their name.

10:56:22AM **Q.** The group name?

10:56:26AM **A.** Or the individual. The -- sorry, I'm just mentally trying to go through all of the fields that I've seen. The service level that Microsoft offers them, the support level that we offer them or OTG offers them. That's all I can recall right now, but an extensive database.

10:56:30AM **Q.** What's the name of the database?

10:56:32AM **A.** It's called IT config.

10:56:35AM **Q.** And is that built on active directory, do you know?

10:56:40AM **A.** I don't know.

10:56:44AM

10:56:49AM

10:56:52AM

10:56:54AM

10:57:03AM

10:57:07AM

10:57:11AM

10:57:20AM

10:57:23AM

10:57:25AM

10:57:27AM

10:57:32AM

11:24:21AM **Q.** So you just rely on the individual memory of individual employees?

11:24:25AM **A.** It's my -- I'm going to stand by what I said. It's my experience that the people who want the file restored know what server it came from.

11:24:32AM **Q.** Wouldn't it strike you as sensible and prudent to maintain just a list of which custodians were mapped to which servers when?

11:24:42AM **A.** You're asking me for my opinion?

11:24:44AM **Q.** Yes, sir.

11:24:45AM **A.** My opinion as a technologist for the number of years that I've done it is that it would be extremely unnecessary and inefficient from a business process standpoint to even to attempt to do that, because people change groups and people change job roles within groups.

11:25:07AM I, for instance, work in OTG. There's hundreds and hundreds of servers that OTG has, and I at times have permissions to one and don't have permissions to one. And even within a single month I'll have permissions to a server and then I won't have permissions to a server.

11:25:24AM **Q.** So your testimony is that keeping a list would simply be too laborious?

11:25:28AM **A.** It would be laborious and it would be a process that is not necessary.

11:25:32AM **Q.** So better, then, to have a system that has as its

11:25:36AM critical starting point the memories of the individuals who
11:25:41AM have worked at Microsoft over the years?
11:25:44AM **A.** A process would be created if there was a business
11:25:47AM need for it; processes are born out of business needs. And
11:25:52AM we've done many restores that -- I can't think of an instance
11:25:59AM where we were unable to do the restore because a person
11:26:02AM didn't know what file server it was on.
11:26:04AM **Q.** Because it's your experience that every single
11:26:07AM employee always knows which file server they were on?
11:26:11AM MS. HARRIS: Objection.
11:26:12AM **Q.** (BY MR. HOSIE) True or false?
11:26:12AM **A.** That's not what I'm saying.
11:26:13AM **Q.** Because sometimes they might not know; true?
11:26:16AM **A.** Sometimes they might not know what?
11:26:18AM **Q.** Which servers they were on, which file shares they
11:26:21AM were assigned to.
11:26:22AM **A.** I could see that being the case.
11:26:23AM **Q.** Sure. And if they don't remember, what then do you
11:26:26AM do if you're looking for a particular piece of information
11:26:28AM for that person?
11:26:32AM **A.** We -- if they don't have -- are you asking me what
11:26:34AM do I do if they don't know what server they were on?
11:26:37AM **Q.** Yes, sir.
11:26:38AM **A.** I inform them that I'm unable to fulfill their
11:26:41AM request.

REPORTER'S CERTIFICATE

I, DIANE MILLS, the undersigned Certified Court Reporter and Notary Public, do hereby certify:

That the testimony and/or proceedings, a transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to tell the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision, to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occurring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.

WITNESS MY HAND AND SEAL this 1st day of October 2003.

DIANE MILLS, CCR #2399
Notary Public in and for the State
Of Washington, residing in King
County. Commission expires 10/10/06.

03:29:45PM

EXHIBIT 6

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP.)
ANTITRUST LITIGATION.)
)
this Document relates to:)
Burst.com, Inc. Vs.)
Microsoft Corp.,)
)
Civil Action No. JPM-02-cv-2952)

VIDEOTAPED 30(b)(6) DEPOSITION UPON ORAL EXAMINATION

OF

MICROSOFT CORPORATION

(DOUGLAS BROWN)

10:30 A.M.

APRIL 21, 2004

925 FOURTH AVENUE, SUITE 2900

SEATTLE, WASHINGTON

DIANE MILLS, CCR #2399

10:43:06AM 1 **Q.** My question, sir: Was it true? If you could
10:43:08AM 2 answer that yes or no, I would appreciate it.
10:43:12AM 3 **A.** It was true that the policy was to exclude PS --
10:43:16AM 4 PST files from the back-up to tape process. The practice,
10:43:24AM 5 which is what I'm here to talk about today, was -- it was not
10:43:28AM 6 properly implemented. So that statement was not accurate.
10:43:32AM 7 **Q.** Thank you.
10:43:36AM 8 Now, as I understand the answer you just gave me,
10:43:38AM 9 sir, it's your current testimony that OTG's policy was not to
10:43:46AM 10 back up e-mails saved on a file server but there were some
10:43:54AM 11 glitches in Microsoft actually -- excuse me, implementing
10:43:58AM 12 that policy?
10:44:00AM 13 MS. HARRIS: Objection. Characterization.
10:44:04AM 14 **A.** My testimony, my clarified testimony is that the
10:44:08AM 15 policy was to exclude PST files from file server -- or from
10:44:16AM 16 backup, the back-up to tape process. However, in preparing
10:44:22AM 17 for this deposition, we found that in March of 2003 the
10:44:30AM 18 exclusion setting to prevent PST file backups was not in
10:44:34AM 19 place.
10:44:46AM 20 **Q.** (BY MR. HOSIE) And when you say the exclusion
10:44:50AM 21 setting was not in place, what do you mean?
10:44:56AM 22 **A.** In my previous deposition we talked about how the
10:44:58AM 23 software works, and there's a -- there's an -- an applet
10:45:02AM 24 that -- or a configuration screen in the software that you
10:45:08AM 25 can -- an operator can say what files to exclude from backup,

10:45:12AM 1 and I believe it's called file exclusion properties. That
10:45:16AM 2 may not be the exact term. And in that applet, the exclusion
10:45:24AM 3 of the PST files was not in place in March of 2003.
10:45:28AM 4 **Q.** In March of 2003. And how did you discover that?
10:45:32AM 5 **A.** In preparation for this deposition, a member of my
10:45:36AM 6 team was given the action item to go back and find out, try
10:45:40AM 7 to do research into the past of what was the first -- what
10:45:48AM 8 was the oldest known implementation of the file exclusion,
10:45:54AM 9 and if possible, who entered the file exclusion.
10:45:58AM 10 **Q.** Who, which person?
10:46:00AM 11 **A.** Correct.
10:46:00AM 12 **Q.** Okay, and what did -- and who was this person, this
10:46:02AM 13 member of your team?
10:46:04AM 14 **A.** Mark Johnson.
10:46:08AM 15 **Q.** And when was Mr. Johnson asked to do that work?
10:46:12AM 16 MS. HARRIS: Objection. Clarification. What work?
10:46:18AM 17 **A.** Are you requesting when Mark was asked to go back
10:46:20AM 18 and find the -- the -- back in time when the file exclusion
10:46:26AM 19 was put in place?
10:46:26AM 20 **Q.** (BY MR. HOSIE) Sir, not moments ago you described
10:46:28AM 21 an action item for Mr. Johnson, did you not?
10:46:32AM 22 **A.** Right. You're referring to that action item?
10:46:34AM 23 **Q.** Yes indeed. When did you ask him to do that?
10:46:36AM 24 **A.** I didn't ask him to do that, I think Rick asked him
10:46:40AM 25 to try to endeavor to find that information. And I believe

11:03:44AM 1 now seven.
11:03:46AM 2 **Q.** Okay. That group, okay. And you've talked to some
11:03:48AM 3 but not all of these 17 people?
11:03:50AM 4 **A.** Yeah, there's only seven left of the people that
11:03:54AM 5 were here.
11:03:54AM 6 **Q.** And the seven you've talked to said it wasn't us?
11:03:56AM 7 **A.** They said that -- they said that they didn't make
11:03:58AM 8 the change.
11:04:00AM 9 **Q.** So when you testified in September of 2003 in your
11:04:06AM 10 first deposition, you knew that mere months before, at least
11:04:12AM 11 some of the PST exclusions were not in place for these backup
11:04:16AM 12 servers?
11:04:16AM 13 **A.** I didn't recall at the time that that tactical
11:04:20AM 14 issue even happened.
11:04:20AM 15 **Q.** Why do you call that a tactical issue?
11:04:22AM 16 **A.** We do about 3,000, what we call incidents or
11:04:26AM 17 tactical issues, tactical incident management, we call it,
11:04:30AM 18 3,000 issues a month. And some portion of those get
11:04:36AM 19 escalated to my team, and some portion of the ones that are
11:04:38AM 20 escalated to my team make it to me, but I don't -- I can't
11:04:44AM 21 tell you on a -- like today I couldn't tell you, describe to
11:04:50AM 22 be a tactical issue that happened in October.
11:04:54AM 23 **Q.** So when you heard that -- well, let me ask this.
11:04:58AM 24 How many backup servers were implicated in this discovery?
11:05:02AM 25 Was it just one?

resources. And her objective in this service was to reduce the number of servers and the amount of disk space required to serve the file server service. So her team requested in that document via their policy document to not save PST files to those servers.

Q. So it's your understanding that don't save e-mails to servers subject to backup originated in a desire to conserve resources?

A. To conserve server and disk resources.

Q. And why the restriction that you don't serve -- save to servers subject to backup as opposed to servers generally?

A. Well, all of her servers were subject to backup.

Q. Then why was it necessary for her to say subject to backup?

A. I don't know what prompted them to use the sentence that they did.

Q. Now, what's your source of the information you've just given us, that this policy originated with Ms. Stark and the reason was to conserve vital server resources?

A. A conversation I had with Candy Stark.

Q. When did you have that conversation?

A. Was that yesterday? I think that was -- I think that was yesterday.

Q. Okay. You referenced a Corporate Services Backup

checked with the owners of this document, found out when it was -- when it was modified to include that verbiage, and tried to determine did they request legal advice and was legal advice given. And the answer was they didn't request legal advice in the creation of this and that no legal advice was given.

Q. And when did you discover that this language "due to legal issues" was added to the policy guideline?

A. The first instance of this showing up on a policy guideline I believe was in July of 1997.

Q. July of 1997, okay. And how did you discover that?

A. It was various iterations of the Share Request Form were shown to me, and the one with a date of 1997 on it had the Paragraph 1 amended to include "due to legal issues."

Q. So that was new language added to this preexisting document?

A. Correct.

Q. Okay. Who made that change?

A. We haven't been able to determine who put pen to paper and made that change.

Q. Well, give me the list of the people that could have made that change, please.

A. I -- I consulted with Candy Stark and her team, and that was -- that was a team from seven years ago. So there's Freddy Sohl, there's James Pretz, I believe. I didn't talk

11:43:58AM **A.** Well, we prepared for this deposition, we talked to Candy and Candy talked to her team, and -- and we talked to the legal team, and in every case we found that no legal advice was sought from LCA and none was given. And Candy's best guess in our conversation this week was that those words "due to legal issues" were put in the document to give it teeth because her team was getting kickback from -- excuse me, pushback from end-users who were wanting to challenge the policy to not store PST files on file servers.

11:44:42AM **Q.** And tell me as precisely as possible what she told you on that score. You talked to her directly about this; right?

11:44:52AM **A.** I was in a conference call with her.

11:44:54AM **Q.** And what did she say about this as precisely as you can recall, sir?

11:44:58AM **A.** I believe that she said that she talked to her team and that, pardon for my hesitation, I'm trying to be as clear as I can. She talked to her team and that no one recalls any legal issues per se that prompted that verbiage and that her team was getting a lot of customer dissatisfaction about -- about the policy and that they put the words in there to add teeth to the policy.

11:45:40AM **Q.** So it's your testimony that Ms. Stark concretely recalls that she wasn't given any advice by anybody on the law side but instead just made up this "due to legal issues"

11:45:54AM things to add teeth to the policy because she was getting
11:45:58AM flack from people who wanted to save e-mails to servers?
11:46:00AM MS. HARRIS: Objection. Mischaracterizes the
11:46:02AM witness's testimony.
11:46:02AM **A.** I wouldn't characterize it exactly how you just
11:46:06AM stated. I'd say what I said before in that Candy does not
11:46:12AM recall -- Candy does not -- did not request any legal advice
11:46:20AM or Candy and her team did not request any legal advice nor
11:46:22AM was any legal advice given, and that that verbiage to the
11:46:28AM best of her guess in our conference call was put there
11:46:30AM because her team was the central managers of these file
11:46:36AM shares, and the policy creators and people from '94 on
11:46:42AM through when the, you know, when she left the team were
11:46:46AM complaining that the policy was too restrictive, that they
11:46:50AM wanted to save PST files.
11:46:52AM **Q.** On servers subject to backup?
11:46:52AM **A.** On the file servers that her team managed.
11:46:54AM **Q.** You said the best of her guess. She's just
11:46:56AM speculating about that; right?
11:46:58AM **A.** That was her speculation in our conference call.
11:47:02AM **Q.** She doesn't know, she doesn't remember?
11:47:04AM **A.** She said based on what she knows now, that that's
11:47:08AM why it was, just that that was the best guess that she could
11:47:10AM provide.
11:47:10AM **Q.** All right, sir. Now, you recall that you provided

for speculation.

A. Your question is, it doesn't square with --

Q. (BY MR. HOSIE) Ms. Stark saying we were getting a lot of pushback from people who wanted to save e-mails to servers?

A. I think it does square, because people weren't allowed to keep e-mail files on file servers and her team was receiving feedback. Now, I didn't ask her to quantify how many people gave her negative feedback.

Q. Sir, the law department has a couple servers that it has dominion and control over, does it not?

MS. HARRIS: Objection. Lack of foundation.

Q. (BY MR. HOSIE) One's Litigate 1, one's Litigate 2?

MS. HARRIS: Objection. Lack of foundation.

A. I don't -- I don't know specifically that they do. Are you talking about servers in the -- that they manage?

Q. (BY MR. HOSIE) Well, I don't know where -- have you heard of the Litigate 1 server?

MS. HARRIS: And objection. Lack of foundation.

MR. HOSIE: I'm asking -- Counsel -- I won't fight about it.

Q. (BY MR. HOSIE) Sir, if you don't know, please say I don't know.

A. I don't recall specifically knowing anything about a server named Litigate 1.

REPORTER'S CERTIFICATE

I, DIANE MILLS, the undersigned Certified Court Reporter and Notary Public, do hereby certify:

That the testimony and/or proceedings, a transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to tell the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision, to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occurring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.

WITNESS MY HAND AND SEAL this 27th day of April 2004.

DIANE MILLS, CCR #2399
Notary Public in and for the State
Of Washington, residing in King
County. Commission expires 10/10/06.

EXHIBIT 7

File Server Information & Support

OTG File Server Policies & Guidelines: OTG Shared Server Policies

Title: OTG Shared Server Policies

Body:

1.) Due to legal issues, mail files (PST files) cannot be stored on any corporate servers that are backed up to tape. This applies to all servers in the data center.

2.) Current data center standards require that all existing or new shares be set up with file level permissions.

3.) Do not remove Administrators from having access to any portion of the share. This will prevent OTG from backing up the data. OTG reserves the right to take ownership of any shares or subdirectories to which Administrators have been denied access. If this is necessary, all existing file level permissions could be erased.

4.) We do not allow FTP or IIS services on any of the shared servers. If you require these services, please note that in the New Share Request form under Special Considerations. We have servers available to offer these services.

5.) In the data center, we are utilizing a space management tool that sets space quotas on your share. For quota level information please refer to New Quota Guidelines. When the quota is exceeded, access to the share will be locked until the share size is reduced. Please note: connected user will receive a warning when quota limit is reached. Out of disk space pop-ups will be enabled after space limit is reached and quota becomes locked.

6.) Generally, any shares on the external network are to be used as drop points for data only, not for data storage. Therefore, these shares are typically limited to no more than 5GB. If you require more than 5GB, please provide business justification for the additional space. Only data requiring access by vendor partners outside of Microsoft should reside on the external network.

7.) Due to security issues, we cannot provide Administrative access to any users of OTG shared servers.

8.) Servers in the Bldg. 11 and Canyon Park data centers are for production data only. No active testing is allowed.

9.) As of Sept 2002 new policies have been put in place giving owners full control of their share allowing them to control access by editing the file share permissions directly without the need to contact Help Desk. If they elected to have R or RW groups created they can manage these permissions through http://Autogroup.

Expires:

Created at 10/25/2002 7:25 AM by Collaboration Operations
Last modified at 12/11/2002 12:37 PM by Collaboration Operations

EXHIBIT 8

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

2004 MAR 17 P 2 2

IN RE MICROSOFT CORP. ANTITRUST LITIGATION

MDL Docket No. 1332

Hon. J. Frederick Motz

This Document relates to

Burst.com Inc. v. Microsoft Corp.,

Civil Action No. JFM-02-cv-2952

~~[PROPOSED]~~ ORDER GRANTING BURST'S MOTION TO COMPEL

Upon consideration of plaintiff Burst's Renewed Motion to Compel Microsoft to Testify as to When, How and Why it Excluded E-Mails from Back-up Tapes, it is ORDERED that Burst's Motion is hereby GRANTED in part as reflected below, and Microsoft will within 30 days of the date of this Order produce for deposition one or more of its officers, directors, or other persons to testify on its behalf , who are the person or persons most knowledgeable of the following subjects:

1 The operation of the systems used by the Operations and Technology Group ("OTG") (or its predecessor organizations) from 1994 to the present to backup files from those servers it manages, with respect to the preservation of e-mails;

2 OTG's directive to Microsoft employees utilizing its services (not to store e-mails on servers that are subject to backup or (2) otherwise to exclude e-mails from being backed-up by Microsoft's backup systems.

3. The reasons why the decisions that resulted in the directives referenced in Specification 2 above were made, and the individuals involved in making, implementing or disseminating those decision.

4. The nature of the legal issues and concerns, and/or matters referred to in MS-CC-BU-192887, and the individuals involved in formulating the policy or procedure expressed by paragraph 1 of MS-CC-BU-192887.

5. The means used to disseminate and implement the policies or procedures referenced in Specifications 2 and 4

6. When the decisions or other acts referenced above in Specifications 1-5 were made or done, and when they were implemented.

7. The persons knowledgeable of the matters referenced in Specifications 1-6 above.

SO ORDERED this 12 day of Nov, 2004.

J. Frederick Motz
U.S. District Judge, District of Maryland

EXHIBIT 9

09:29:50AM

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP.)
ANTITRUST LITIGATION.)
)
this Document relates to:)
Burst.com, Inc. Vs.)
Microsoft Corp.,)
)
Civil Action No. JPM-02-cv-2952)

COPY

VIDEOTAPED 30(b)(6) DEPOSITION UPON ORAL EXAMINATION

OF

DOUGLAS BROWN

(MICROSOFT CORPORATION)

9:42 A.M.

SEPTEMBER 14, 2004

925 FOURTH AVENUE, SUITE 2900

SEATTLE, WASHINGTON

REPORTED BY: Diane M. Mills, CCR No. 2399

was turned on as of April 2003; also correct?

A. Correct, file exclusion was on in April of 2003.

Q. Through some work of yours along with the work of others?

A. Correct, as we talked about in the last deposition.

Q. Indeed we did, sir. And you now have confirmed for me that according to Chris Jacobs, the file exclusion was also not turned on in April of 2000; correct?

A. That's her recollection.

Q. As Microsoft's 30(b)(6) witness under court order, sir, let me ask you this. Is it your testimony that the file exclusion was in fact turned on prior to April 2003?

A. I may have heard your question wrong. Are you saying it was turned on?

Q. Yes.

A. Prior to April 2003?

Q. Yes.

A. I did not say that.

Q. No, my question is, was it?

A. Oh, you asked if my testimony was that it was turned on. My testimony is that it was not on in March

09:57:18AM 1 do know about the data center is it's a controlled
09:57:21AM 2 environment and a highly disciplined environment, and I
09:57:24AM 3 would find it uncommon for people to flit in and out
09:57:29AM 4 and change properties without other people knowing.
5 Q. So you would agree with me --
09:57:31AM 6 A. We have a set of standards that we follow.
09:57:33AM 7 Q. Fair enough. Because it is a controlled
09:57:35AM 8 environment?
09:57:35AM 9 A. Yes, sir.
09:57:35AM 10 Q. So you would agree with me that as a matter of
09:57:38AM 11 probabilities, it is most likely that the exclusion was
09:57:41AM 12 off between April 2000 and April 2003?
09:57:45AM 13 MS. HARRIS: Objection. Foundation, calls for
09:57:47AM 14 speculation, asked and answered. You may answer.
09:57:53AM 15 A. I'm sorry, that was so many words. Your --
09:57:56AM 16 your -- can you please restate the question?
09:57:57AM 17 Q. (BY MR. HOSIE) I'd be happy to, sir.
09:57:59AM 18 As a matter of probability, you'd agree that
09:58:01AM 19 most likely the property exclusion was not turned on in
09:58:04AM 20 the period April 2000 through March of 2003?
09:58:08AM 21 MS. HARRIS: Same objection.
09:58:11AM 22 A. Based on the information that I received from
09:58:14AM 23 Chris Jacobs and Mark Johnson, I think it's likely that
09:58:20AM 24 it was not turned on in that time frame, but I can't
09:58:23AM 25 physically verify it.

10:08:49AM 1 produce specific documents. I've been told that, you
10:08:55AM 2 know, don't delete e-mail, you know, don't -- don't do
10:08:58AM 3 anything to your e-mail because you're under document
10:09:01AM 4 retention. I've heard of people that have had that
10:09:04AM 5 said to them, but I don't remember ever being asked to
10:09:07AM 6 produce a document.
10:09:08AM 7 Q. Fair enough. And given -- given your
10:09:11AM 8 knowledge about document retention obligations and the
10:09:16AM 9 pendency of litigation, did you give no thought, sir,
10:09:19AM 10 to whether you should talk to a lawyer before
10:09:21AM 11 implementing the backup exclusion in April 2003?
10:09:28AM 12 A. I did not give any thought to talking -- to
10:09:31AM 13 talk to a lawyer before making that decision because I
10:09:34AM 14 was completely empowered to make that decision.
10:09:36AM 15 Q. It was your call to make and you made it?
10:09:38AM 16 A. As the service owner for the corporate backup
10:09:41AM 17 system, I -- I actually thought I was implementing a
10:09:47AM 18 policy that had already been implemented.
10:09:49AM 19 Q. All right, sir. Now, you're aware that
10:09:51AM 20 Microsoft has represented to Judge Motz, a judge in our
10:09:57AM 21 case, on many occasions that the practice of actually
10:10:00AM 22 excluding from backup archive PST files was in effect
10:10:04AM 23 from 1994 forward?
10:10:06AM 24 MS. HARRIS: Objection. Foundation.
10:10:09AM 25 A. I don't know that for a fact. I know that in

10:22:17AM Q. I totally understand that, sir.

10:22:19AM A. So as this consolidated file service took shape, people would get their old server back. When they got space on our new servers they would get their old server back, so they had the option of saving it on their old server if they wanted to.

10:22:35AM Q. Right. And Candy's domain was only the OTG managed servers?

10:22:40AM A. Correct.

10:22:41AM Q. So you said she was getting pushback. What did she tell you about getting pushback on this don't save to my servers policy?

10:22:50AM A. She would get an e-mail back from a business owner saying why do you have this policy not to store mail files. And they said it was to -- she would respond back because it's to save space, we're trying to consolidate from 1,500 servers down to 500 servers, we don't have the space to store these large files. You have other options, therefore, save 'em -- save 'em as you please elsewhere.

10:23:17AM Q. And your --

10:23:19AM A. Those are my words, not hers.

10:23:20AM Q. I understand you're recounting to me the substance of what she told you.

10:23:24AM A. Correct.

10:23:24AM Q. In your conversations over the last several
10:23:26AM months.
10:23:26AM A. Correct.
10:23:33AM Q. So to make sure I understand where we are,
10:23:35AM it's your testimony that Ms. Stark working with her
10:23:38AM team originated this policy of no e-mails saved to OTG
10:23:43AM managed servers?
10:23:44AM A. That's my understanding from my conversations
10:23:46AM with Candy.
10:23:47AM Q. And did she talk to any Microsoft lawyers
10:23:49AM about that policy during her promulgating it?
10:23:53AM A. To her recollection she hasn't talked to
10:23:55AM anybody outside her team about that. Or she didn't
10:23:58AM talk to anybody outside her team about that policy.
10:24:00AM Q. Does she know that anyone checked with the
10:24:02AM Microsoft lawyers about that policy?
10:24:04AM A. She indicated that -- that it was their
10:24:07AM decision to make and that no one from her team, Candy
10:24:11AM did not and no one from her team has said that they
10:24:14AM have talked to anybody outside their team.
10:24:17AM Q. Well, sir, do you know, didn't she receive
10:24:20AM notifications about the importance of Microsoft
10:24:22AM preserving documents given pending litigation?
10:24:25AM MS. HARRIS: Objection. Calls for
10:24:26AM speculation, lack of foundation.

10:25:54AM 1 did you just refer to?
10:25:55AM 2 A. Oh, so my mail is on my mail server, my
10:25:59AM 3 Exchange server, and on my laptop.
10:26:00AM 4 Q. Okay, the hard disk on your laptop?
10:26:04AM 5 A. Correct.
6 Q. Okay.
10:26:05AM 7 A. And they were trying to prevent people from
10:26:06AM 8 putting a third copy of that out on a file share.
10:26:10AM 9 Q. Yeah, which would be on a tape subject to
10:26:12AM 10 backup in some storage facility in Renton?
10:26:15AM 11 MS. HARRIS: Objection. Calls for
10:26:16AM 12 speculation.
10:26:17AM 13 A. It would be -- well, if the process was
10:26:21AM 14 implemented correctly it wouldn't have been on a tape.
10:26:22AM 15 It was -- Candy was attempting to free up that space,
10:26:27AM 16 prevent that from being on the disk to free up that
10:26:31AM 17 space.
10:26:31AM 18 Q. (BY MR. HOSIE) Now my question. In 2003,
10:26:33AM 19 sir, your -- you weren't of course told by a lawyer
10:26:37AM 20 about the obligations to preserve documents when you
10:26:40AM 21 decided to implement the exclusionary property;
10:26:44AM 22 correct?
10:26:44AM 23 MS. HARRIS: Objection. Characterization.
10:26:45AM 24 A. I was not -- when I made that decision I made
10:26:48AM 25 that of my own volition.

10:29:19AM 1 year 1994 or was it sort of '94, '95?
10:29:23AM 2 A. Sure about which item?
10:29:24AM 3 Q. The implementation of -- the origination of
10:29:27AM 4 the policy that thou shalt not save e-mails to servers
10:29:32AM 5 subject to OTG backup.
10:29:33AM 6 A. I didn't ask her her degree of certainty on
10:29:36AM 7 the date. She said in 1994 when we created the -- the
10:29:40AM 8 service that the policy was put in place.
10:29:46AM 9 Q. Okay. And it was your understanding of her
10:29:50AM 10 conversation with you that she on her own decided that
10:29:55AM 11 e-mail documents uniquely should not be stored on
10:30:00AM 12 servers subject to backup?
10:30:01AM 13 A. That policy was her -- she derived that
10:30:04AM 14 policy. It was of her choosing.
10:30:06AM 15 Q. And were there other documents that she said
10:30:09AM 16 shouldn't be saved to servers subject to backups, or
10:30:13AM 17 was it just e-mail?
10:30:14AM 18 A. It was just PST -- just at the time MMF files.
10:30:18AM 19 It was just archives of e-mail, to my knowledge. I
10:30:21AM 20 don't recall hearing that it was ever another kind.
10:30:23AM 21 Q. So she, as you understand it, didn't care
10:30:25AM 22 about any other kind of document that people could
10:30:28AM 23 store on the servers, she only cared about making sure
10:30:30AM 24 e-mails weren't archived on servers subject to backup?
10:30:33AM 25 MS. HARRIS: Objection. Calls for

10:30:34AM speculation.

10:30:34AM A. I don't know if she cared about other files or not. I know that the policy listed the archive, mail archives.

10:30:37AM Q. (BY MR. HOSIE) And mail archives alone?

10:30:41AM A. From my understanding.

10:30:42AM Q. From what sort of person did she receive resistance to this thou shalt not save policy, I think your word was pushback?

10:30:45AM A. When I -- the two times that I've spoken with her about it, she said it was people that were requesting the shares. So I don't know if those people were -- were administrators or individual contributors or otherwise.

10:30:53AM Q. Microsoft employees?

10:30:57AM A. Correct. You had to be a Microsoft employee to request a share.

10:31:02AM Q. And presumably some could have been fairly senior employees?

10:31:05AM MS. HARRIS: Objection. Calls for speculation.

10:31:09AM Q. (BY MR. HOSIE) If you know.

10:31:12AM A. I don't -- I would say it would be -- being in ITG at the time, it would mostly be lower level employees. They're asking for space to share files,

10:31:16AM

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10:31:32AM

10:31:32AM

10:31:33AM

10:31:38AM

10:31:42AM

volumes.

Q. (BY MR. HOSIE) Let me try a different question, then.

She became aware as people migrated the data that e-mail, archived e-mail is consuming considerable storage space?

A. My conversation with her, that the archived mail was consuming a considerable amount of space on her consolidated file servers.

Q. Enough so that she viewed it as a problem?

MS. HARRIS: Objection. Characterization.

A. I believe the existence of the policy -- well, I don't know that, this is my opinion. My opinion is the existence of the policy was her proactively knowing her business and knowing what was going to consume her resources.

Q. (BY MR. HOSIE) So the policy as you understood it originated in her appreciation that people were in fact archiving lots of e-mail? That's why it was a problem?

A. And that she did not want that data consuming her resources.

Q. So it was in fact the presence of lots of archived e-mail that originated in her policy of saying please don't store it on my server subject to backup,

Q. So you can't archive mail on the Exchange servers, as you understand it?

MS. HARRIS: Objection. Foundation.

Q. (BY MR. HOSIE) If you know, sir.

A. It's technically possible but only to an administrator, and no one at Microsoft would know how to do that except for the Exchange administrators. So Exchange -- you can think of Exchange servers as live e-mail.

Q. When you say live e-mail, what do you mean?

A. Unarchived e-mail.

Q. Okay, so if someone sends me an e-mail and if I don't delete it, it sits there in my received box, if you will, and if I send an e-mail it's saved in my send box?

A. If that's how you configured your system, correct, in Outlook.

Q. Are you aware, sir, of limitations on size imposed on Microsoft employees for their live e-mail files on Exchange servers?

A. Yes.

Q. What are those limitations, please?

A. I believe my limitation is 200 megabytes.

Q. And in terms of e-mail consumption, is that a lot or a little?

11:04:11AM A. It feels like a lot right now.
11:04:14AM Q. How many e-mails do you have? I mean, give me a sense of what that means in terms of saved e-mail.
11:04:16AM Is it a thousand e-mails, 10,000, limitless?
11:04:19AM
11:04:22AM MS. HARRIS: Objection. Vague.
11:04:25AM A. I can speak to what I know.
11:04:27AM Q. (BY MR. HOSIE) Sure.
11:04:28AM A. And I have 1,800 e-mails in my live mail folder.
11:04:32AM
11:04:33AM Q. And have you ever been capacity constrained where the Exchange server says you've got too much, you've got to clear it up before it'll let you get more?
11:04:35AM
11:04:38AM
11:04:41AM
11:04:41AM A. Yes.
11:04:42AM MS. HARRIS: Objection. Vague.
11:04:42AM Q. (BY MR. HOSIE) How often has that happened to you?
11:04:44AM
11:04:44AM A. It's happened in the -- it hasn't happened for probably a year, but it happened when I had my system misconfigured to not purge deleted mail.
11:04:48AM
11:04:51AM
11:04:55AM Q. What's your auto delete option, you personally?
11:04:57AM
11:04:58AM A. I auto delete every time I exit Outlook.
11:05:04AM Q. So there's a property for auto delete every time you exit?
11:05:07AM

11:14:20AM a name to that.

11:14:31AM Q. So you have no information to offer on the origination of this tribal knowledge?

11:14:36AM A. Only what I testified to before which is the same as I just testified to you now.

11:14:39AM Q. We talked some in our last session, sir, about the origination of the language, the preparatory clause "due to legal reasons."

11:14:42AM A. Uh-huh.

11:14:56AM Q. Mail should not be saved on servers subject to backup. Do you recall our conversation on that subject?

11:15:00AM A. I believe it said "due to legal issues."

11:15:03AM Q. "Due to legal issues," thank you. And that language was changed a little later too, wasn't it?

11:15:04AM A. From what I understand, it was changed to "because of legal constraints."

11:15:05AM Q. Or something like that?

11:15:10AM A. I -- yeah, I'd have to see a written document to tell you.

11:15:10AM Q. And in our last session, sir, you were unable to tell me anything about any legal reasons that might have been underlying that language; correct?

11:15:12AM A. I was unable to tell you what legal issues Candy was referring to in her document.

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11:15:24AM

11:15:27AM

11:15:31AM

11:15:33AM

11:15:37AM

11:18:31AM Q. To combat the pushback?

11:18:32AM A. Yeah. They -- I can see the -- I can see in '94 when the policy was created they got pushback and they continued, and they adapted it to a written form because a written form has a lot more --

11:18:44AM Q. Gravity?

11:18:44AM A. Yeah. And then they refer it back to, this isn't my rule but look at Microsoft's general document retention policy. That didn't work. And then added "due to legal issues."

11:18:57AM Q. In November '96?

11:18:59AM A. I believe it was November of '96.

11:19:02AM Q. Okay. What's the basis for your testimony that Candy and her folks continued to get pushback in the -- from the fall of '95 through 1996?

11:19:15AM A. My conversation with Candy Stark.

11:19:17AM Q. That's what she told you?

11:19:18AM A. Correct.

11:19:20AM Q. And she said we tried just referring the people that were pushing to the Microsoft document retention policies and procedures; correct?

11:19:28AM A. She said that they would refer them back to Microsoft's general document retention policies. And then she doesn't recall asking someone to write "due to legal issues," and the person doesn't -- the other

people on her team don't remember writing it on a document. But they've -- it's obviously there and we've seen that it existed in fall of '96. And they owned the document.

Q. Right. So Ms. Stark doesn't remember adding those words herself?

A. Correct. That's her -- that's her statement to me.

Q. And nor does anybody else in her group, according to her?

A. According -- and according to Laurie -- Laurie Brown says she didn't remember doing it, although Laurie Brown sent her a mail referring to it, from what I understand. And Freddie says that she doesn't recall ever doing it.

Q. Okay. But Ms. Stark does remember -- let me ask this as a question, not as a statement.

Does Ms. Stark remember originating the notion of adding these words to combat pushback or is that just her best speculation as she thinks back?

A. My conversation with her in August was she speculated that that's why she -- that's why it was added.

Q. Okay. And has your work to prepare yourself for our session today given you any further information

on whether that speculation was rooted in fact or not?

A. Only the fact that they -- that the new information that I have for preparing for this deposition was that last time I wasn't aware that they were referring people back to Microsoft's document retention policy in -- in the spring of '96.

Q. And that's something that you learned in a more recent conversation with Ms. Stark?

A. Right.

Q. Okay. And please tell me as precisely as you can what she told you about that pushback and her response in the spring of '96.

A. She said she began referring people back to the general Microsoft retention practices that were referred to in an e-mail from Bill Neukom.

Q. This is the Bill Neukom e-mail on e-mail retention policies that circulated in the summer of 1996?

A. I've never seen the e-mail. I don't know.

MR. HOSIE: Counsel, I'd again ask that that be produced.

MS. HARRIS: And we claim privilege over that and we continue to claim privilege over that document.

MR. HOSIE: It went 30,000 people. I'll save it. Strike that comment.

and "I speculate." So I don't -- I wouldn't call that concrete.

Q. (BY MR. HOSIE) And so she gets pushback, she says, okay, let's refer them to the general counsel's e-mail on document retention. But that didn't stop the pushback, did it?

A. I believe it did not completely stop the pushback.

Q. And you say that because she continued to get enough pushback that she added or someone added that "due to legal issues" language in November of '96?

A. She speculated in my conversation with her that they added that language to the document to add teeth to it to further discourage pushback.

Q. And from that you would infer that her referring people to the Neukom e-mail was not sufficiently successful in deterring pushback?

MS. HARRIS: Objection. Calls for speculation.

A. I can't say whether it wasn't successful or whether it was simply a revision of a -- a policy of -- a periodic revision of a policy document.

Q. (BY MR. HOSIE) Okay, but my question wasn't clear. Let me ask it differently.

So she -- she does, as I understand it, three

(Recess taken.)

VIDEO OPERATOR: We're back on the record, the time on the monitor is 11:45 a.m.

(Deposition Exhibit No. 1 was marked for identification.)

Q. (BY MR. HOSIE) Mr. Brown, I've marked during our break as Exhibit 1 a memo from Laurie Brown -- excuse me, an e-mail from Laurie Brown to Sherry Hatfield and Candy Stark.

Do you have that before you, sir?

A. I do.

Q. You've referenced several times a November 1996 e-mail as a document that as you understand it first reflected the "due to legal issues" language?

A. The early -- yeah, right, the earliest reference to a printed document I believe was from November of 1996.

Q. And is this the document you were referencing in your testimony earlier?

A. Yes, sir.

Q. Have you now told me everything you know about the origination of the "due to legal issues" language?

A. I believe that I have.

Q. Have you told me everything you know about who was involved in the decision to add those words?

REPORTER'S CERTIFICATE

I, DIANE M. MILLS, the undersigned Certified Court Reporter and Notary Public, do hereby certify:

That the testimony and/or proceedings, a transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to tell the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision, to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occurring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.

WITNESS MY HAND AND SEAL this 22nd day of September 2004.

Diane M. Mills

DIANE M. MILLS
Certified Court Reporter
CCR No. 2399
Notary Public in and for the State of Washington, residing in King County. Comission expires 10/10/06.

EXHIBIT 10

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND
NORTHERN DIVISION

BURST.COM, INC.

v.

MICROSOFT CORPORATION

Defendant

CIVIL CASE NO.
JFM-02-2952
MDL-1332

Thursday, May 20, 2004
Baltimore, Maryland

Before: Honorable J. Frederick Motz, Judge

Appearances:

On Behalf of the Plaintiff:
Spencer Hosie, Esquire

On Behalf of the Defendant:
John Treece, Esquire
Susan V. Harris, Esquire
Michael F. Brockmeyer, Esquire

Reported by:
Mary M. Zajac, RPR
Room 3515, U.S. Courthouse
101 West Lombard Street
Baltimore, Maryland 21201

THE CLERK: The case pending before the Court is

had to eat humble pie in a very big way because I wrote the Court on September 23rd that we had discovered that an outside vendor that my law firm had hired to conduct electronic word searches had made an error.

Your Honor, I have some notebooks, just four or five attachments that I would like to use during the argument. Can I hand those up?

THE COURT: Sure. And I want to make it clear. In terms of the recent history and, Mr. Hosie, I certainly would hear, I'm willing, I absolutely take the point that you're making now, that you all came back, that you've been responsible in many respects since this has all started, that the mistake made by, I guess it's Mr. Brown, I forget, in terms of the incident that happened out in the one division, you know, that may show good faith, not bad faith, and could have been a mistake.

But what concerns me, the "due to the legal issues", how that, just because, I find that hard to believe in context. But it could be true. I'm not saying it's not true. But I find it raises questions, let me put it that way, not that I find it hard to believe. But it raises questions. And that the explanation thus far given, that it was somebody who was just trying to enforce the policy to get it done is somewhat dubious.

And that it would seem to me -- frankly, I want to know because this happened before me. So forget whether Mr. Hosie wants to know it. I want to know as much as I can.

In fact, let's cut right to the chase. I want to know without hearing from you, and I want you to, if it's the 30(b)(6) is the first way to do it or whether it's an independent investigation by somebody, I want to know as much as I can how

that "due to legal issues" language got in there and I want you to search your legal files to find it. And I also want you to educate somebody and have them deposed. I want this to come out.

It could very well, it could be that the explanation is right. I'm not saying that it is wrong. But I want to know the answer.

And I also want to know who, if anyone, talked to Mr. Allchin before he sent out that e-mail from the Legal Department and what was said. Maybe not what was said, only what was said if it was, if it's not covered by privilege. But forget whether Mr. Hosie wants to know it. I want to know it. And in order to

do that, the mechanism we're going to do is for me to grant Mr. Hosie's motion for you to search that legal file, prepare somebody right. Mr. Allchin can be deposed, as long as he's not abused, as long as he wants, as long as Mr. Hosie wants. He can depose Mr. Gates about the document, about anything he knows about this issue as well.

This happened before me and I'm not satisfied with the explanation on the present record.

MR. TREECE: Your Honor, let me address three points you made. One concerns the Allchin e-mail. Second, I'll address what we did in anticipation of the 30(b)(6) that we have done. And third, I want to address the accusation, somehow we violated a court order you entered because it's just not true.

On the Allchin e-mail. The Allchin e-mail says that employees are not to archive. It doesn't use the word "save." Not archive e-mails for more than 30 days. And I make the distinction because it would be foolish to interpret Mr. Allchin to be suggesting that employees should destroy e-mails that they

MR. TREECE: Thank you.

THE COURT: Thank you all very much.

(Conclusion of Proceedings.)

REPORTER'S CERTIFICATE

I, Mary M. Zajac, do hereby certify that I recorded stenographically the proceedings in the matter of Burst.com v. Microsoft Corporation, Case Number(s) JFM 02 2952, on May 20, 2004.

I further certify that the aforegoing pages constitute the official transcript of proceedings as transcribed by me to

the within matter in a complete and accurate manner.

In Witness Whereof, I have hereunto affixed my signature this _____ day of _____, 2004.

Mary M. Zajac,
Official Court Reporter

EXHIBIT 11

Filed Under Seal

EXHIBIT 12

1994

ITG (and Microsoft) is in the process of doing business differently concerning Corporate File and SQL servers. In the past, individual departments where required to purchase their own hardware for these types of servers. Now, ITG will be the sole purchaser of Corporate File and SQL server hardware. In addition, because it is too expensive to maintain older hardware, we will be placing your shares / SQL databases on the latest / greatest hardware (pentiums servers, with at least 64M of RAM or higher depending on performance needs).

Advantages:

1. You will no longer need to worry about purchasing File / SQLserver hardware.
2. You will always be running the latest hardware.
3. Each system has Data Guard (Raid 5) for data integrity.

The cost of the initial consolidation is free to your department. We will be tracking the cost per department, for requested disk space and will be sending out monthly reports (once implemented) on actual disk space used and the cost of maintaining data to the Share Owners and Department Heads, (BillG will also get a report on Data Center costs). Department heads will need to Plan for their department data storage future needs and budget appropriately for next fiscal year.

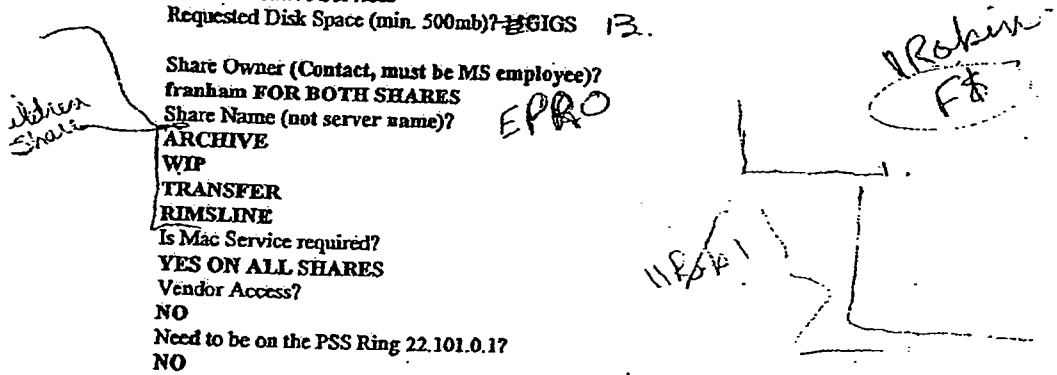
If you currently have Servers located in Building11 Data Center, we would like to meet with you to discuss server consolidation. Depending on the type of hardware your server is currently running, it may be sent back to you or recycled.

Please answer the following questions for Disk Space requirements.

Department # /Department Name (Word Group, Excel ect..)
7009 - Creative Services
Requested Disk Space (min. 500mb)? ~~2~~GIGS 12.

Share Owner (Contact, must be MS employee)?
franham FOR BOTH SHARES
Share Name (not server name)? EPRO
ARCHIVE
WIP
TRANSFER
RIMSLINE
Is Mac Service required?
YES ON ALL SHARES
Vendor Access?
NO
Need to be on the PSS Ring 22.101.0.1?
NO
SLM Source Share?
NO
SQL databases?
NO
Permissions? Who is to have access to this share? (groups: example_r (read only); example_rw (read/write); example_pusers (full control))?
Create Shares under the Root share name?

SHARE	GROUP	MEMBERS	PERMISSIONS



ARCHIVE	~~EPRO~~	BRUCEF	READ/WRITE
		DEBBIEEL	
		DEBP	
		KIRKWE	
		MAURYD	
		NATESU	
		PATTIRE	
		ROBINH	
		KEITHGR	
	~~BEEZ~~	FRANHAM	~~CHANGE~~
		GREGD	
		DEANNADA	
		RENEESH	
		A-JOCELP	
WIP	EPRO		READ/WRITE
	BEEZ		CHANGE
TRANSFER	EPRO		READ/WRITE
	BEEZ		CHANGE
	EVERYONE		READ/WRITE
RIMSLINE	BEEZ		CHANGE

NOTE: Please note that MMF files are not to be stored on ITG Corporate Server that are backed up to tape. All server in Building 11 are backed up nightly.

If you have any other server needs please let us know and we will work together on your special requests.

If you have any questions please contact me at ex 66046.

Thanks Candy

EXHIBIT 13

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP. ANTITRUST LITIGATION,	**MDL Docket No. 1332**
This Document relates to:	**Hon. J. Frederick Motz**
Burst.com, Inc. v. Microsoft Corp.,	
Civil Action No. JFM-02-CV-2952	

MICROSOFT CORPORATION'S RESPONSE TO BURST'S MAY 13, 2004 RULE 30(b)(6) DEPOSITION NOTICE REGARDING THE PRIOR PRODUCTION OF MS-CC-BU 000000364288

By letter dated May 13, 2004, Burst.com requested a Rule 30(b)(6) deposition of Microsoft regarding whether a January 23, 2000 e-mail string from Mr. Allchin to Mr. Valentine, produced in this case as MS-CC-BU 000000364288 ("Subject Document"), had been produced in other Microsoft litigation and, if so, where. By agreement of the parties, in lieu of producing a deponent to address the noticed topics, Microsoft is providing the following written response.

1. In order to respond to this request, Microsoft reviewed information relating to relevant major matters and litigation for which Microsoft has previously made production materials available to Burst and to which Microsoft was or is a party. For those cases and matters, Microsoft undertook reasonable efforts to ascertain whether the Subject Document has been previously produced. Specifically, the cases reviewed were:

- *United States v. Microsoft Corp.* (DOJ Liabilities and DOJ Remedies);

- *Civil Investigative Demand No. 98-087 Relating to Microsoft Office* (Office CID);
- *Civil Investigative Demand No. 20812 Regarding Microsoft's Acquisition of Stock in Corel Corporation* (Corel CID);
- *Coordination Proceeding Special Title* (JCCP 4106) (OCA (California));
- *In re Microsoft Corp. Antitrust Litigation* (MDL Docket 1332) (OCA (MDL));
- *In re Microsoft Corp. Antitrust Litigation Relating to All Competitor Cases* (MDL Docket 1332) (Competitor Cases);
- *AT&T Corp. v. Microsoft Corp.* (No. 97-5358);
- *Bristol Technology, Inc. v. Microsoft Corp.* (No. 398 CV 1657);
- *Be, Inc. v. Microsoft Corp.* (CV 02738);
- *Netscape Communications Corp. v. Microsoft Corp.* (CV 02090);
- *Sun Microsystems, Inc. v. Microsoft Corp.* (No. C97-20884) (Sun I);
- *Sun Microsystems, Inc. v. Microsoft Corp.* (CV 02739) (Sun II Preliminary Injunction and Merits); and
- *Burst.com Inc. v. Microsoft Corp.* (CV 02952)

These cases are collectively referred to herein as the "Cases".

2. With respect to each of the Cases, Microsoft searched the document database(s) associated with each case to determine whether the Subject Document was produced within the case. As a result of those searches and based on its review of the best information available to it

at this time, Microsoft has concluded that the Subject Document was not previously produced in any of the Cases.

3. In the course of conducting the above review, Microsoft located additional e-mail messages including Mr. Allchin relating to the Subject Document that it is producing herewith as MS-CC-BU 000000372870 - 74.

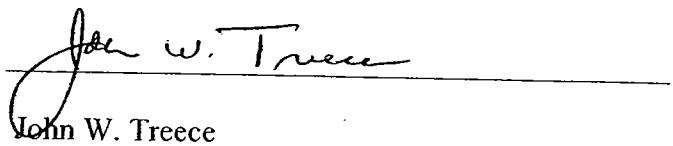
4. By way of clarification, Microsoft has also determined that the e-mail Mr. Allchin testified about in his February 13, 2002 deposition ("Deposition") was not the Subject Document. In his Deposition, Mr. Allchin was referring to an e-mail he sent to the "Platforms Product Group" on January 28, 2000 (produced herewith as MS-CC-BU 000000372870 - 71), five days after the Subject Document. In the January 28, 2000 document, Mr. Allchin clarifies the Subject Document and reminds recipients that instructions from the legal department to retain e-mail related to pending litigation override other retention guidelines.

5. The Subject Document was produced by Microsoft in response to Burst's request that it produce the Allchin e-mail referred to by Mr. Richard Ochs in his October 3, 2003 deposition testimony. The Subject Document was identified by Mr. Ochs as the document he recalled and about which he testified. Upon Microsoft's recent discovery of the January 28, 2000 Allchin e-mail (MS-CC-BU 000000372870-71), we showed that document, without its attachment, to Mr. Ochs and inquired whether he recalled it. Mr. Ochs recalls seeing the January 28, 2000 e-mail before and believes it also informed his testimony during his October 2003 deposition. In his mind, he understood the two documents to be as one because the January 28,

2000 document acted as a clarification of the Subject Document. At this time, he does not recall additional relevant documents.

DATED this 11th day of June 2004.

MICROSOFT CORPORATION

By: 

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Attorneys for Defendant Microsoft Corporation

CERTIFICATE OF SERVICE

Mark R. Johnson, an attorney, hereby certifies that on June 11, 2004, he caused a true and correct copy of the foregoing document, Microsoft Corporation's Response to Burst's May 13, 2004 Rule 30(b)(6) Deposition Notice Regarding the Prior Production of MS-CC-BU 000000364288, to be served upon the following counsel for the Plaintiff:

Spencer Hosie (via Facsimile and U.S. Mail dated 6/11/04)
Bruce J. Wecker
John McArthur
HOSIE, FROST, LARGE & McARTHUR
One Market, Spear Street Tower, 22nd Floor
San Francisco, CA 94105

Robert Yorio (via U.S. Mail dated 6/11/04)
CARR & FERRELL, LLP
2200 Geng Road
Palo Alto, CA 94303

Mark R. Johnson

From: Jim Allchin
Sent: Friday, January 28, 2000 6:15 PM
To: Platforms Group
Subject: email retention

My recent email concerning email retention has lead to many questions. I'm very glad to see folks taking this issue seriously and raising issues. In an effort to answer the many questions I have received, I've contacted Legal and HR. They tell me that there is a task force from Legal, ITG and Exchange working on updated retention guidelines and processes that will help us with this important issue.

In the meantime, some of you have asked for pointers to the "official policy". Below is email from legal that Legal and HR confirm is the only written "official policy" on *general document* retention (this was first sent company-wide in the summer of 1996). It discusses 6 months maximum unless it is critical to save. My mail (and brian's email) discussed 30 days for email; I didn't mention documents in the most general sense.

To the best of your ability I would like us to follow the general rule of around 30 days for EMAIL. Some of you may be in unique circumstances that require particular information to be kept for longer than 30 days to do your job effectively. My direction to you is that I want you to think about this issue at least once a month and delete items that are no longer needed, including all your general email. Don't just blindly archive email!

Also, many of you have received specific instructions from Legal to retain certain documents or email that may be related to pending litigation. These instructions override the general policy. You should follow those instructions carefully and ask Legal if you have any questions.

jim

Document retention policy

From: Tom Burt (LCA)
Sent: Friday, July 09, 1999 10:54 AM
To: Erica Couch (LCA); Lesley Halverson (LCA)
Cc: Tom Burt (LCA)
Subject: Document retention policy

Attorney-client privileged communication

Legal advice re document retention practices

Privileged

From: Chris Williams (HR)
Sent: Friday, January 28, 2000 8:19 AM
To: Bob Herbold; Jim Allchin; Tom Burt (LCA); Brian Valentine; Bob Eshelman (LCA); Helen Sanders (LCA); Linda Girgis (LCA)
Cc: Chris Enslein (LCA); Rich Wallis (LCA); Diane D'Arcangelo (LCA); Bill Neukom (LCA); Valerie Ditore
Subject: RE: Email Archives - attorney-client privileged

Privileged

-----Original Message-----
From: Bob Herbold
Sent: Friday, January 28, 2000 8:15 AM
To: Jim Allchin; Tom Burt (LCA); Brian Valentine; Bob Eshelman (LCA); Helen Sanders (LCA)
Cc: Chris Enslein (LCA); Rich Wallis (LCA); Diane D'Arcangelo (LCA); Bill Neukom (LCA); Valerie Ditore; Chris Williams (HR)
Subject: RE: Email Archives - attorney-client privileged

Privileged

-----Original Message-----
From: Jim Allchin
Sent: Friday, January 28, 2000 7:38 AM
To: Tom Burt (LCA); Bob Herbold; Brian Valentine; Bob Eshelman (LCA); Helen Sanders (LCA)
Cc: Chris Enslein (LCA); Rich Wallis (LCA); Diane D'Arcangelo (LCA); Bill Neukom (LCA); Valerie Ditore
Subject: RE: Email Archives - attorney-client privileged

Privileged

-----Original Message-----
From: Tom Burt (LCA)
Sent: Thursday, January 27, 2000 4:11 PM
To: Bob Herbold; Jim Allchin; Brian Valentine; Bob Eshelman (LCA); Helen Sanders (LCA)
Cc: Chris Enslein (LCA); Rich Wallis (LCA); Diane D'Arcangelo (LCA); Bill Neukom (LCA); Tom Burt (LCA)
Subject: RE: Email Archives - attorney-client privileged

Attorney-client privileged communication

Privileged

Privileged

-----Original Message-----
From: Bob Eshelman (LCA)
Sent: Tuesday, January 25, 2000 10:38 AM
To: Tom Burt (LCA); Helen Sanders (LCA)
Subject: FW: Email Archives

Privileged

-----Original Message-----
From: Bob Herbold
Sent: Tuesday, January 25, 2000 10:36 AM
To: Bob Eshelman (LCA); Chris Williams (HR)
Cc: Valerie Ditore; Jim Allchin
Subject: RE: Email Archives

Privileged

-----Original Message-----
From: Jim Allchin
Sent: Monday, January 24, 2000 7:48 AM
To: Bob Herbold
Cc: Valerie Ditore
Subject: FW: Email Archives

Can you help me out here?

thanks,
jim

-----Original Message-----
From: A S Kabir
Sent: Sunday, January 23, 2000 11:34 AM
To: Jim Allchin
Subject: RE: Email Archives

I've searched handbook/itgweb/lcaweb for a web page on email retention policies, to no avail;

http://lcaweb/finance/corprec/pages/corpemail.asp is still under construction.

I know this seems nitpicky, but it would be helpful for me to know exactly what falls under the 30 days policy. Everything? Non-technical issues? Check-in mail?

-----Original Message-----
From: Jim Allchin
Sent: Sunday, January 23, 2000 9:46 AM
To: Brian Valentine; Windows Division
Subject: RE: Email Archives

Being even more hardcore....

This is not something that you get to decide. This is company policy. Do not think this is something that only applies to a few people. Do not think it will be ok if I do this; it hasn't caused any problems so far. Do not archive your mail. Do not be foolish. 30 days.

jim

-----Original Message-----
From: Brian Valentine
Sent: Saturday, January 22, 2000 11:43 AM
To: Windows Division
Subject: Email Archives
Importance: Low

I'm not really picking on the person below... but we should really be using wise email retention practices of keeping nothing older than 30 days of old email. I mean this - purge every 30 days... I personally only keep 15 days... to prove it here is the property page (right click on the folder) on my Sent Items folder (but it's the same on all my folders)... get rid of it - don't store it in PSTs, don't keep it around - just get rid of it! Auto-Archive is setup in the Tools->Options->Other tab as to how often it runs...

<< OLE Object: PBrush >>

Here is email I saw the other day:

-----Original Message-----

just an fyi - **NEVER LET YOUR PST FILE GET AS LARGE AS 2GB, OR IT WILL BE TOTALLY CORRUPTED.** Thanks to this bug, I lost 3 years of mail archives.

EXHIBIT 14

Patrick Gogerty (LCA)

From: Jim Allchin [IMCEAEX-_O=MICROSOFT_OU=APPS-WGA_CN=RECIPIENTS_CN=JIMALL@prestongates.com]

Sent: Friday, January 28, 2000 6:15 PM

To: Platforms Product Group

Subject: email retention

My recent email concerning email retention has lead to many questions. I'm very glad to see folks taking this issue seriously and raising issues. In an effort to answer the many questions I have received, I've contacted Legal and HR. They tell me that there is a task force from Legal, ITG and Exchange working on updated retention guidelines and processes that will help us with this important issue.

In the meantime, some of you have asked for pointers to the "official policy". Below is email from legal that Legal and HR confirm is the only written "official policy" on *general document* retention (this was first sent company-wide in the summer of 1996). It discusses 6 months maximum unless it is critical to save. My mail (and brian's email) discussed 30 days for email; I didn't mention documents in the most general sense.

To the best of your ability I would like us to follow the general rule of around 30 days for EMAIL. Some of you may be in unique circumstances that require particular information to be kept for longer than 30 days to do your job effectively. My direction to you is that I want you to think about this issue at least once a month and delete items that are no longer needed, including all your general email. Don't just blindly archive email!

Also, many of you have received specific instructions from Legal to retain certain documents or email that may be related to pending litigation. These instructions override the general policy. You should follow those instructions carefully and ask Legal if you have any questions.

jim

<<Document retention policy>>

Patrick Gogerty (LCA)

From: Tom Burt (LCA) [IMCEAEX-_O=MICROSOFT_OU=APPS-WGA_CN=XENIX+5FUSERS_CN=TBURT@prestongates.com]
Sent: Friday, July 09, 1999 10:54 AM
To: Erica Couch (LCA); Lesley Halverson (LCA)
Cc: Tom Burt (LCA)
Subject: Document retention policy
Importance: High

Attorney-client privileged communication

Legal advice re document retention practices

Unless you are instructed to do otherwise by a member of the legal department or the tax group, you should keep only those documents that are necessary for you to perform your job, or for someone else to perform his or her job. The documents that are necessary to the performance of your job, or necessary to the performance of someone else's job, will vary from person to person. You should discuss any questions you have about what you should retain with your manager, and if you continue to have questions, you should contact the docinfo alias. As a general matter, no email message should be kept for more than six months unless it is absolutely essential that it be retained longer. The same policy applies to other documents, with the caveat that the number of non-email documents whose retention beyond six months is absolutely

essential will vary significantly from group to group.

The word "document" as used in this email means any thought or communication preserved in a tangible medium. This includes any hard-copy material such as memos, reports, correspondence, and handwritten notes; any electronically preserved material, including email, on hard disks, floppies, servers, or backup tapes; and videotapes, audiotapes, and voicemail.

EXHIBIT 15

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP. ANTI TRUST LITIGATION,	CERTIFIED COPY
This Document relates to:	
Burst.com, Inc. v. Microsoft Corp.	MDL Docket No. 1332
Civil Action No. JFM-02-cv-2952	

DEPOSITION UPON ORAL EXAMINATION OF

THOMAS W. BURT

9:30 A.M.

SEPTEMBER 8, 2004

925 FOURTH AVENUE, SUITE 2900

SEATTLE, WASHINGTON

KATHY L. HAUCK, CCR No. 2705

Q. Communicated via e-mails beyond the ones we have here?

A. I don't know.

Q. Okay. Please tell me everything you recall about your communications with Mr. Allchin on this subject.

MR. TREECE: Object, it's overbroad, it's ambiguous, it attempts to invade the attorney-client privilege.

A. I don't recall anything other than the e-mail that is -- that's -- the e-mail thread that's stapled after this e-mail in this document you showed me.

Q. (BY MR. HOSIE) Mr. Burt, what was your basis for testifying that you had communications with Mr. Allchin on the subject?

A. My basis for communicating -- testifying is that I recall communication with Mr. Allchin. I also see this e-mail that shows communication between Mr. Allchin and myself. That's it.

Q. What communications do you recall, sir?

A. I -- what I recall is the substance of the communication I had with Mr. Allchin. I don't recall if it was only this e-mail exchange or whether there were other communications as well. I don't remember. I do remember the substance of my legal advice and the information that I discussed with Mr. Allchin.

Q. Putting the substance --

A. And I don't know that I remember all that, I just remember certain aspects of it.

Q. Fair enough. Putting aside the substance of the communications, I think your testimony is that you recall communicating with Mr. Allchin, but you right now can't tell me whether it was just in the e-mails we have or whether there were additional written or oral communications?

A. That's right. I think it is likely that it is just these e-mails, and that there may have also been some oral communication, and I'm unsure whether there were or were not. I don't believe that there were other e-mail communications.

Q. Why do you say --

A. But I can't say with certainty that there were not.

Q. What makes you think there weren't?

A. Pardon?

Q. What makes you think there were not other e-mail communications?

A. Just my general recollection of this particular instance of being asked for legal advice and the legal advice I gave. My general recollection of the events are that -- cause me to think that it's likely that this was the -- these were the communications I had with Mr. Allchin, with the possible addition of an oral communication, and I'm just not sure about that.

REPORTER'S CERTIFICATE.

CERTIFIED COPY

I, KATHY L. HAUCK, the undersigned Certified Court Reporter and Notary Public, do hereby certify:

That the sworn testimony and/or proceedings, a transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to tell the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision, to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occurring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.

WITNESS MY HAND AND SEAL this 20th day of September, 2004.

KATHY L. HAUCK,
Washington CCR License No. 2705
Notary Public in and for the
State of Washington, residing
in King County. Commission
expires 3/6/06.

EXHIBIT 16

0001

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

STATE OF NEW YORK, et al.,
Plaintiffs,
vs.
MICROSOFT CORPORATION,
Defendant.
No. 98-1233 (CKK)

Videotaped Deposition Upon Oral Examination
of
JAMES ALLCHIN

8:05 a.m.

February 13, 2002

One Microsoft Way

Building 44

Redmond, Washington

Az

Protective Order Designations Served February 19, 2002

[redacted]

[redacted]

Cheryl Macdonald, CCR
Court Reporter
License No. MA-CD-OC-A457LC

0002

APPEARANCES

FOR THE PLAINTIFFS:

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Attorney at Law
45 Rockefeller Plaza
New York, NY 10111

and

MARK J. BRECKLER
Deputy Attorney General
455 Golden Gate Avenue
Suite 11000
San Francisco, CA 94102-7004

Q. When did these training sessions commence?
A. I'm actually not 100 percent sure. Certainly last year sometime.
Q. Do you recall whether or not they commenced before or after the RPFJ?
A. I think they were primarily after, but I can't be 100 percent sure.
Q. Was there a product under development last year in Microsoft known by the code name Yukon?
A. A technology is under development called Yukon, that's right.
Q. What technology is that?
A. It's a new storage system that would underpin several different -- be used in several different products.
Q. Do you recall anyone at Microsoft expressing concern that the level of integration between products using Yukon created a possible problem under the Court of Appeals decision?
A. No, but to be clear, given the Court of Appeals, and the proposed final judgment, there are a lot of discussions, you know, about, is this okay, is it not okay, so we are having those discussions.
Q. Have you had discussions like that with people who report to you?
A. Yes.
Q. Have you had such discussions outside the presence of legal counsel?
A. Not to my knowledge. We have a standing group with legal counsel present where we review general strategic directions and we send directions to the -- for execution by the product teams, but that's with legal counsel.
Q. Have you personally changed any of your practices with respect to sending E-mail as a result of this litigation?
A. Yes.

Q. Can you describe what those changes were?
A. I probably matured quite a bit.
Q. Are you more careful about what you write in E-mails?
A. Yes, I am.
Q. Do you write fewer E-mails?
A. No. I probably write more.
Q. Are you more careful what you write in view of your experience in the litigation?
MR. HOLLEY: Objection, asked and answered.
A. Well, to be clear, I think just if you go over time we all get a little wiser, and I think the first time I saw stuff written, I said, hmm, that doesn't -- doesn't reflect well.
Q. Have you had any discussions with people in your group about their E-mail practices in light of the litigation?
A. No. We have a document retention policy, but most of the people -- many of the people that I would come

in contact to already have to maintain their documents. But outside of that we do encourage people, separate from litigation, we just encourage people to own and keep documents based on business need.

Q. Apart from document retention, which I'm going to ask you about very shortly, have you discussed with people

0044

who report to you the fact that they should be careful what they write down in view of the ongoing litigation?

A. I think in general the attorneys have lectured us pretty hard on this topic.

Q. I don't want to pry into what your attorneys have said, but have you personally had discussions like that with people that report to you?

A. I am sure that I have encouraged them not to use obscenities and to be mature and not put full concepts in their E-mail, yes.

Q. You talked about document retention policies. Does Microsoft have document retention policies in place?

A. Yes.

Q. Were you instructed after this litigation commenced not to delete or destroy any documents that might be relevant to the litigation?

A. Well, there are several different lawsuits, and they vary in their particular needs for what they are trying to retain, and the document retention that I was talking about was the company policy, which any of the legal cases override that.

Q. Do you understand that you are supposed to save and not delete any E-mail that might be of relevance to this litigation?

MR. HOLLEY: Object to the form of the question.

0045

Calls for a legal conclusion.

A. I think that everyone has a lot of my E-mail.

MR. HOUCK: Can I hear his answer back, please.

(Record read as requested.)

Q. Okay. I'm going to ask you the question again.

A. Okay.

Q. I've seen some of your E-mail that I know that it exists, but do you have any understanding that as a result of this litigation you're not supposed to delete E-mail that might be of relevance to the issues in this case?

MR. HOLLEY: Object to the form of the question. Requires a legal conclusion.

A. I just recently received a document retention dealing with this case. I obviously didn't delete anything.

Q. Have you recently issued any instructions to people reporting to you with regard to document retention?

A. No. I don't know. Some time ago I reminded people that there was a document retention policy for Microsoft.

Q. Approximately a year and a half ago, did you issue any instructions to Microsoft employees suggesting that they would be allowed to delete their E-mail?

A. If they weren't under specific instructions not

(2)

to they should follow the Microsoft policy.
Q. When you say specific instructions not to, can
0046
you clarify what you mean?
A. Yes. When, in the case of a particular lawsuit, there's a piece of mail that comes from the attorney saying you're hereby instructed to retain all information of any material, which they define what material is, and then they tell us, dealing with these subjects, and each individual gets that from the attorney.
Q. Were these instructions that you issued in writing?
A. Following the document retention?
Q. Yes.
A. Yes, I believe so.
Q. And did you issue those approximately a year and a half ago?
A. Oh, I don't know. Don't know.
MR. HOUCK: I would like to make a request on the record for those instructions, please.
MR. HOLLEY: We'll take it under advisement. Discovery is closed.
MR. HOUCK: Sounds like a short advisement.
MR. HOLLEY: I'm still thinking about it, though.
MR. HOUCK: Okay. I'm grateful for that, I guess, at least.
Q. Rob Short was deposed in this case on February 8, just a few days ago. Is he somebody who works in your
0047
organization?
A. Yes, he is.
Q. I have a rough transcript, which means it's not -- it's the first transcript produced by the court reporter who -- she hasn't had an opportunity yet to go through and clean up the errors. So I want to acknowledge that, but I want to read you some testimony that Mr. Short gave on February 8th and ask you some questions about that. The question was: Do you know how long your E-mail is saved or how it's otherwise stored? And he answered: It's saved on my machine -- well, I keep it on a server and I had a rule on the server, until the legal department told me to change it, that deleted my E-mail after a month -- after a month's, and I have one folder, I think, that I moved some things into that lasted a little longer than that, but Jim Allchin has a policy that says we don't keep E-mails, that saves him trouble.
Do you know what he's talking about?
MR. HOLLEY: Object to the form of the question.
A. I am sure that I have -- I've told people that unless you have business reasons to keep it, there's no reason to keep the E-mail. In Microsoft we have a policy of generally for people have 100 megabytes of storage for E-mail. They obviously run out of that pretty quickly. I get nothing but complaints about running out of the storage.
0048
And so I encourage people to discard stuff. It's also

3

confusing stuff when you have old specs that aren't the current specs. I want the things to be current.

Q. Now, when you told people this did you tell them that in writing?

MR. HOLLEY: Object to the form of the question. Asked and answered.

A. Yeah, I think so.

Q. Did you also tell them the same thing orally?

MR. HOLLEY: Object to the form of the question.

A. Not to my recollection.

Q. Do you know whether you saved the E-mail that reflected your instructions in that regard?

A. No, I don't know that. It wouldn't have been applicable to this case. I also delete E-mails from my wife, which one of them showed up before. So my personal life I try to keep out of this.

Q. It's a bit off the point, but I was reading in one of your documents that you gave a presentation where you referred to -- you actually went into your wife's computer when she was at home to demonstrate some new technology?

A. Yes.

Q. Not going to ask a question about that. I was intrigued by that, but back to the issue here.

MR. HOLLEY: That would be impossible if Mr. Houck's clients get their way.

Q. This E-mail that contained your instructions about document retention, did you clear that with the legal department before you sent it out?

A. I think I did, yes.

Q. Do you recall who in the legal department you ran it by?

A. Well, there were several. I don't remember who. I know that there were discussions specifically about this. I had asked for help on that.

Q. Is it your understanding that your E-mail was approved by in-house counsel at Microsoft before it was transmitted to other employees?

A. Yes.

Q. Mr. Short testified he thought your E-mail was sent out about a year and a half ago. Is that consistent with your recollection?

A. Yeah. I'm guessing, yeah.

MR. HOUCK: We've talked a bit already about the RPFJ. I'm going to ask that a copy be marked as Allchin Exhibit 2.

(Marked Deposition Exhibit 2.)

Q. Now, you've already told me, I believe, that you've recently reviewed the RPFJ which actually begins at page 3 of Allchin Exhibit 2; is that correct?

A. Yes.

Q. Had you seen copies of this when it was in draft form?

A. Yes, I did.

Q. Did you have any role in advising the Microsoft

EXHIBIT 17

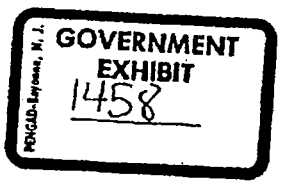
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, PLAINTIFF, V. MICROSOFT CORPORATION, DEFENDANT.	C.A. NO. 98-1232
STATE OF NEW YORK, ET AL., PLAINTIFFS, V. MICROSOFT CORPORATION, DEFENDANT.	C.A. NO. 98-1223
MICROSOFT CORPORATION, COUNTERCLAIM-PLAINTIFF, V. DENNIS C. VACCO, ET AL., COUNTERCLAIM-DEFENDANTS.	JANUARY 13, 1999 WASHINGTON, D.C.

VOLUME 37-B

TRANSCRIBED DEPOSITION EXCERPTS

COURT REPORTER: DAVID A. KASDAN, RMR
MILLER REPORTING CO., INC.
507 C STREET, N.E.
WASHINGTON, D.C. 20003
(202) 546-6666



DID NOT THREATEN MICROSOFT TERRIBLY. THERE WAS A SENSE THAT THE PACE AT WHICH THE INVESTIGATIONS PROCEEDED RELATIVE TO THE PACE AT WHICH TECHNOLOGY MOVES AHEAD WERE SO--THERE WAS SUCH A DISCREPANCY BETWEEN THE TWO OF THEM THAT BY THE TIME THE DEPARTMENT OF JUSTICE OR OTHER, YOU KNOW, KINDS OF GOVERNING BODIES THAT MIGHT HAVE A STAKE IN WHAT OCCURS HERE--BY THE TIME THEY WERE ABLE TO FIGURE OUT WHAT WAS REALLY GOING ON, THAT IT DIDN'T MATTER IF THEY UNDERSTOOD THE WHOLE PICTURE, BECAUSE MICROSOFT WOULD--IT WOULDN'T MATTER ANYMORE.

EFFECTIVELY, WHATEVER THE ISSUE WAS THAT WAS AT STAKE, HOWEVER IT ENDED UP BEING RESOLVED, THE TECHNOLOGY WOULD HAVE MOVED AHEAD, AND IT WOULD SORT OF BE MOOT.

SO I RECALL THIS MAINLY BECAUSE I WAS SORT OF SURPRISED AT THE OPEN EXPRESSION OF THIS KIND OF CYNICISM ABOUT THE PROCESS AND ARROGANCE THAT MICROSOFT WOULD BE ABLE TO--COULD GET AWAY WITH THESE THINGS, AND THEY WERE ABLE TO ASSUME THAT EVERYONE ELSE WOULD NOT MOVE FAST ENOUGH TO EVER BE ABLE TO STOP THEM. AND BY THE TIME THE FACTS ACTUALLY CAME OUT, IT WOULDN'T MATTER.

Q. DID HE SAY ANYTHING ELSE IN THAT PART

OF THE CONVERSATION?

A. WELL, THE OTHER INTERESTING THING THAT HE STATED AT THAT TIME WAS--AND I DON'T RECALL EXACTLY HOW THIS PARTICULAR POINT CAME OUT, BUT HE INDICATED THAT PART OF WHAT MADE--PART OF WHAT MADE IT DIFFICULT FOR PEOPLE TO TRACK WHAT MICROSOFT'S THINKING WAS ON PARTICULAR TOPICS WAS THAT THERE WAS AN UNDERSTANDING THAT YOU DON'T--YOU DON'T NECESSARILY SAVE ALL YOUR E-MAILS.

Q. "YOU" BEING--

MR. EDELMAN: I THINK YOU HAVE TO LET THE WITNESS FINISH THE ANSWER BEFORE YOU INTERRUPT HIM.

MR. LINZER: CONTINUE YOUR ANSWER.

THE WITNESS: HE WAS TALKING ABOUT HIMSELF.

AND MY UNDERSTANDING WAS THAT THAT WAS A VIEW THAT WAS HELD MORE BROADLY WITHIN THE COMPANY. AND THE POINT OF VIEW WAS THAT YOU DON'T SAVE ALL YOUR E-MAILS BECAUSE THOSE CREATE A PAPER TRIAL THAT CAN BE USED AGAINST YOU IN MANY OF THESE CASES, AND THAT THAT WAS A LESSON HE HAD LEARNED EARLY ON IN HIS TIME IN MICROSOFT.

AND WE DIDN'T REALLY EXPLORE THAT IN

EXHIBIT 18

Filed Under Seal

EXHIBIT 19

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND/NORTHERN DIVISION

IN RE: MICROSOFT LITIGATION

_____/ August 28, 2003

MDL NO. 1332

TRANSCRIPT OF MOTIONS HEARING
BEFORE THE J. FREDERICK MOTZ,
UNITED STATES DISTRICT JUDGE

APPEARANCES:

On behalf of Sun Microsystems:

John Isbister, Esquire
Spencer Hosie, Esquire

On behalf of Microsoft:

John W. Treece, Esquire
Jeffrey D. Herschman, Esquire

Reported by:

Jacqueline Sovich, CRS, RMR
Official Court Reporter

collected from these individuals multiple times over the years.

Now, here as you know from the letter that Mr. Hosie sent you, Burst and Microsoft have come to substantial agreements about who the proper custodians are. There's no question about that.

There's no question about the scope, and there's also no question about the scope of the collection that has occurred from those custodians.

And so in light of the very substantial collection from those custodians, what's the basis of this broad allegation and accusation that Burst is making?

First, Burst correctly points out that their files contain e-mails sent to and received from Microsoft, that Microsoft's files do not have. But the significant majority of these are to or from Will Friedman, the individual who left in September 2000, long before this case got filed, and the individual who Burst's principal contact, in fact, the contact for Burst at Microsoft so that the so-called gap is not surprising.

Second, the second basis for this charge, is that the search of Microsoft's custodians, some of whom were copied on Burst-related materials, hasn't turned up certain Burst-related documents. So, therefore, these had never existed or they were deleted.

today. And that's to allow the software developers, who are working on these very complex multi-file, multi-directory pieces of software to recover, if there was a disaster, if there's a crash, that's the fundamental focus of all of the backup policies, not archival in this particular area.

Now, for the time period here, September, '99, to March, 2001, so this is not the March 2000 date, but a year beyond, there are approximately 25,000 backup tapes. Each backup tape is identified by the file server it backed up. The tape is not identified by the employees who happened to use that file server. Nor is there a record of which file servers were used by which individuals.

So as a result, Your Honor, in order even to conceivably start a search of the type that Burst proposes, the custodian would have to know which file servers he used during the period.

Absent that identification, it would be a virtual impossibility, and I would say certainly an impractical possibility, to start looking through 25,000 tapes, looking for clues as to whether particular custodians' files are on a particular tape.

By our estimate, it would take over a million hours to do that, many of which would be spent on sequential tasks, and that is only done -- would get you to the point, then, of looking for the responsive documents. That's only

to identify what you should look at.

THE COURT: What's the comparable number of tapes for the period September '99 through March 2000?

MR. TREECE: Well, I could do the math. I don't have any reason to think it wouldn't be a strict ratio.

THE COURT: All right.

MR. TREECE: Now, furthermore, as we discuss in our brief even if some of the custodians know which file servers they used two to four years ago, doing what Burst proposes would be an extraordinary effort.

First, the backup tape would have to be loaded onto a server and read to create a catalog.

THE COURT: Well, let me ask you, you say the custodian would have to know what file server they used. Couldn't some IT person tell that by tying into the PC? I would have know idea what file server I'm using, but I would hope that if I call Andy, he would know, our IT director would know.

MR. TREECE: The answer is almost in all cases, no. It would have to be the individual. In other words, what's happened is the individual has been given space on a file server, and he would have to tell us which file server that is.

Again, the issue here is that the fundamental purpose of the backup system for these developers is

to be put on the backup tapes.

MR. HOSIE: That's right. But that wasn't true before.

THE COURT: No, it wasn't true before. But I understood this did not affect pre-existing e-mail, but only e-mails that one tries to put on the server after April 2000.

Is that right, Mr. Treece?

MR. TREECE: Yes, in terms of the backup.

In other words, if it had been backed up prior to that time, it would be -- if somebody had kept in March of 2000 had violated company policy, put an e-mail, it would have been backed up.

In April, when the new software was there, he would have put new additional e-mails on this server, stored to the server. When that backup tape at the end of April was prepared, that would not have been put onto the backup tape. It would have been excluded from the backup.

THE COURT: Well, actually, maybe two things. Any new e-mails generated in April, plus any e-mails that had been stored on a prior backup tape.

MR. TREECE: Would not be on the backup tape created in April.

THE COURT: In April.

MR. TREECE: But it remains on the backup tape.

THE COURT: Thanks. Okay. Good.

(Proceedings concluded)

I, Jacqueline Sovich, RPR, CM, do hereby certify that the foregoing is a correct transcript from the stenographic record of proceedings in the above-entitled matter.

_____

Jacqueline Sovich DATE
Official Court Reporter

EXHIBIT 20

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND
NORTHERN DIVISION

IN RE: MICROSOFT LITIGATION

_____/

MDL 1332
Friday, February 6, 2004
Baltimore, Maryland

Before: Honorable J. Frederick Motz, Judge

Appearances:

On Behalf of Sun Microsystems:
Lloyd R. Day, Jr., Esquire

On Behalf of Burst:
Spencer Hosie, Esquire

On Behalf of Defendant Microsoft:
David B. Tulchin, Esquire
John W. Treece, Esquire

(NOTE: Only those who verbally participated have been listed.)

Reported by:
Mary M. Zajac, RPR
Room 3515, U.S. Courthouse
101 West Lombard Street
Baltimore, Maryland 21201

THE COURT: Please be seated. We're here on a series

within the OTG, the other group, not the Digital Media Division, but the more corporate group, the evidence has been unambiguous that PSG files have been excluded from file server back-ups since the 1994-96 period, as Mr. Hosie has reported what Mr. Brown, the witness from that division, said. I personally told Mr. Hosie before the deposition that would be the testimony. The testimony was given. It's confirmed by documentary evidence.

So that's a policy that's been in place six to eight years before this lawsuit was filed, three to five years before anyone from Microsoft met anyone from Burst.

Third, whatever answers would be elicited by this interrogation, I want to make clear that they will not shed any light on whether documents were or were not produced in this

case because, with immaterial exceptions here, both at the OTG and at the DMD and, frankly, in my experience every major corporation, backup tapes are recycled periodically, in this case 12 months. So whether or why e-mails were or were not backed up on to tapes in 1994, '95, 2000, would not make any difference here. Those tapes would not be available pursuant to our recycling policy. That's common, that has business justification, and it is not really challenged.

So the question is asked, will have no utility here. But finally, most importantly, we have offered a witness. We offered a properly educated witness. That is we've agreed to give Hosie, Mr. Hosie, as much as we can give him in response to his motion. There's nothing else we can do.

And so we're left to ask, why are we here?

Now, let me go back to these two witnesses. Mr.

hour.

MR. HOSIE: He did.

THE COURT: Good job.

MR. HOSIE: Thank you, Your Honor.

THE COURT: It will be three hours unless something -- and this will be subject to the collateral estoppel ruling and what happens there. It could be that this deposition's going to be postponed until we go through, it's entirely up to Mr. Hosie. But it could be, depending on what the Fourth Circuit does, the briefing on the collateral estoppel issues, because it could be that more questions have to be asked. And then the three hours will go up. Thank you very much.

The only other thing I wanted to mention was, implicitly, I also am going to talk to -- I was saying if I was Judge Whyte I'd want to rule on the summary judgment. I'm going to call Judge Whyte and find out what he wants. So all of this is subject to my talking to him.

(Conclusion of Proceedings.)

REPORTER'S CERTIFICATE

I, Mary M. Zajac, do hereby certify that I recorded stenographically the proceedings in the matter of In Re: Microsoft Litigation, Case Number(s) MDL 1332, on February 6, 2004.

I further certify that the aforegoing pages constitute the official transcript of proceedings as transcribed by me to

the within matter in a complete and accurate manner.

In Witness Whereof, I have hereunto affixed my signature this _____ day of _____, 2004.

Mary M. Zajac,
Official Court Reporter

EXHIBIT 21

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP.)
ANTITRUST LITIGATION.)
)
this Document relates to:)
Burst.com, Inc. Vs.)
Microsoft Corp.,)
)
Civil Action No. JPM-02-cv-2952)

VIDEOTAPED DEPOSITION UPON ORAL EXAMINATION

OF

AMIR MAJIDIMEHR

9:37 A.M.

AUGUST 6, 2004

925 FOURTH AVENUE, SUITE 2900

SEATTLE, WASHINGTON

DIANE M. MILLS, CCR No. 2399

A. I sometimes do, sometimes don't. It depends on what -- if I want to save something I'd save it.

Q. Do you occasionally maintain archived e-mails on the Exchange server?

A. My e-mail is on the Exchange server predominantly.

Q. So all your e-mail is on the Exchange server?

A. All my e-mails are -- that's where I keep my inbox and everything else is in there, yeah.

Q. And do you have a personal e-mail deletion practice you follow?

A. Personal e-mail deletion practice.

Q. Like you keep it for six months or two months?

A. Not specifically during any time period per se. Its capacity limited so we have -- the mailbox is a maximum size so you can't keep things indefinitely, so.

Q. And the capacity is?

A. It varies. Depends on -- you know, throughout my career sizes changed, but I believe right now it's close to 100 megabytes or something I think is maybe the limit.

Q. Have you ever been capacity constrained on the e-mail Exchange server?

A. Yes.

Q. And what do you do when you're capacity constrained?

A. I search for large documents that people have sent

me, for example, multi-megabyte enclosures, and I look at them, and if it's not something I need to keep I delete those first to make space. But I also look at messages that are just not necessary anymore and clean those up.

Q. How often do you do that, generally speaking?

A. It's not like a regular schedule where every week I go do that. As I need it, if my mailbox gets full, obviously I have to go do it then. If I'm traveling my e-mail fills up much quicker, and then when I come back I may have to clean it up to be able to use my e-mail functionality.

Q. What's your understanding of Microsoft's document retention policies as you've honored them in your tenure there?

A. It's quite substantial. When I get that notice I -- you mean general or --

Q. General, yeah.

A. In general?

Q. Apart from litigation notices.

A. If you need a message saved, you save it. If you don't need it, don't save it. I mean, it's standard practice. Those machines, the fuller they get the slower the mail servers run, so it's a general practice about don't keep extra stuff you don't need. It slows everybody else down in the server.

Q. Okay. Are you aware of a company policy that

REPORTER'S CERTIFICATE

I, DIANE MILLS, the undersigned Certified Court Reporter and Notary Public, do hereby certify:

That the testimony and/or proceedings, a transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to tell the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision, to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occurring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.

WITNESS MY HAND AND SEAL this 16th day of August 2004.

DIANE MILLS, CSR# 2399
Notary Public in and for the State
Of Washington, residing in King
County. Commission expires 10/10/06.

EXHIBIT 22

IN THE UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

SUN MICROSYSTEMS, INC., a Delaware corporation, Plaintiff,

vs.) No. C 97-20884 PVT (ENE)

MICROSOFT CORPORATION, a Washington corporation, Defendant.

THIS TRANSCRIPT DESIGNATED ATTORNEYS EYES ONLY

DEPOSITION UPON ORAL EXAMINATION

OF

MARK C. JOHNSON

1:28 p.m.

December 15, 1998

1201 Third Ave

Seattle, Washington

Margaret Walkky, CCR, RPR, RMR, CRR

Court Reporter, WALKKMV498MQ

which is Exhibit-7, which lists a tape and then with certain fields of information about that tape?

A. It could be. I don't believe that we could get that kind of information from it. It's possible, but it would be very difficult. It would be very difficult.

Q. Does it identify and match up a tape with a server or a number of servers whose data is stored on that tape?

A. Yes.

Q. And is that information presented in a table-like structure such that you have a tape number and then you have a row indicating what file servers were backed up on that tape?

A. It's in a series of tables. I have looked for that in the past and there's -- you have to open different or use different tables and using some matching. It's difficult to explain. You probably could find it, but it's not an easy process.

Q. Do you have any electronic files or hardcopy files indicating at this point in time which PCs at Microsoft are mapped to which file servers?

A. None that I know of.

Q. Is it the case that any individual at Microsoft can decide to save a Word document on any

remember the name. I could find it, but I don't know who it is.

Q. You granted that person access to the data which was stored on the server somewhere?

A. (Nods head.)

Q. And that person at some time later asked you to then put that data back onto the tape?

A. Correct.

Q. Overriding whatever information was on the tape?

A. Correct.

Q. Subsequently when you went to look at the tape, the data from those two files wasn't there anymore?

A. When we were requested by counsel to restore those files recently, it was then when we got these errors that I recalled what had taken place.

Q. Do you believe those two files were erased by Mr. Gates' technical assistant?

A. It's only an assumption.

Q. Would that be your conclusion?

A. Probably.

Q. Were any other files to your knowledge erased?

A. I really don't know.

say that there are probably closer to 200,000. I really don't know for sure.

Q. What period do these tapes cover?

A. Some go all the way back to '84 and '85, that kind of range.

Q. Do you know how many tapes there would be that cover the '95 through '97 time frame for file servers?

A. No, I don't.

Q. On the Exchange server side, do you also do full backups and incremental backups?

A. The Exchange server, we do full backups every night.

Q. Only full backups?

A. Right, correct.

Q. Are those also on a 28-day rotation?

A. Yup.

Q. Do you do any snapshots of the Exchange servers once per month?

A. No.

Q. So the only tapes that you make are the nightly full backups?

A. Correct.

Q. And no tapes are ever stored for longer than a 28-day period?

A. Correct.

Q. Are any of those tapes ever copied?

A. No.

Q. Do you know whether your practices with respect to backing up Exchange servers are the same as the practices at the Canyon facility if they have Exchange servers that they back up?

A. To my knowledge, they have only one Exchange server out there that supports the staff that works there and I back that up, to my knowledge.

Q. Are your practices the same for that server as for the rest?

A. Yes.

Q. Are there any other Exchange servers at the Redmond facilities that are backed up by anyone other than your group?

A. I believe that there are several that are in an Exchange lab. Where that is, I don't know. But those I do not back up.

Q. Do you know, is there a specific name for that lab?

A. Not really. I would call it the dogfood lab. That's what I've heard it referred to as.

Q. Is there only one such place to your knowledge?

C E R T I F I C A T E

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

I, the undersigned Registered Merit Reporter and an officer of the Court under my commission as a Notary Public for the State of Washington, hereby certify that the foregoing deposition upon oral examination of MARK C. JOHNSON was taken before me on December 15, 1998; and transcribed under my direction;

That the witness was duly sworn by me to testify truthfully; that the transcript of the deposition is a full, true, and correct transcript to the best of my ability; that I am neither attorney for, nor a relative or employee of, any of the parties to the action or any attorney or counsel employed by the parties hereto, nor financially interested in its outcome. IN WITNESS WHEREOF, I have hereunto set my hand and seal this..... day of..... 1998.

.....
Margaret Walkky, Notary Public in the
State of Washington, residing at Seattle.
Commission expires 9-18-01, CSR WALKKMV498MQ

EXHIBIT 23

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP. ANTITRUST LITIGATION,	**MDL Docket No. 1332**
This Document relates to:	**Hon. J. Frederick Motz**
Burst.com, Inc. v. Microsoft Corp.,	
Civil Action No. JFM-02-CV-2952	

DECLARATION OF MARTHA J. DAWSON IN SUPPORT OF MICROSOFT CORPORATION'S OPPOSITION TO BURST'S MOTION TO COMPEL

I, Martha J. Dawson, make the following declaration in support of Microsoft Corporation's Opposition to Burst.com Inc.'s Motion To Compel.

1. I am a partner in the law firm of Preston Gates & Ellis LLP ("Preston"). I am the practice group leader for Preston's Document Analysis Technology Group, a practice group in our litigation department. In my 22 years of practice, I have focused on large, document-intensive litigation matters, including serving as trial counsel in several matters. Among other things, in the firm's representation of the State of Alaska in the *Exxon Valdez Oil Spill Litigation*, I managed the discovery between the parties, including the State's document production. I began working on Microsoft Corporation's substantial document productions in 1995, and am the partner at Preston primarily responsible for the overall document review, production and management for Microsoft in all major litigation. Since 1997, my practice has focused primarily on document and discovery management for various clients.

2. In order to properly manage Microsoft's cases, I typically work with another Preston partner, as I have done here, to oversee and manage the collection, review and production of Microsoft documents, including documents responsive to requests by Burst.com Incorporated and the other competitor plaintiffs. I am familiar with Microsoft's document production efforts in this case, as well as the facts and circumstances discussed in this declaration.

3. The four competitor plaintiffs (Be, Netscape, Sun and Burst.com) have to date filed a total of 13 sets of requests for production of documents. There are a combined 407 requests for production. The Competitor Cases are by far the most complex and extensive document collection and review that we have ever handled for Microsoft.

4. Microsoft, with very limited exceptions, does not maintain enterprise-wide subject matter files. Rather, Microsoft documents are maintained by or on behalf of individual employees. To conduct a search reasonably calculated to locate documents responsive to Burst's and the other Competitor Plaintiffs' requests, Microsoft has searched the files of individuals ("custodians") who, based on their position within the company, review of key documents, and interviews of numerous employees, were deemed likely to possess responsive documents.

5. Microsoft has already collected and processed millions of pages from the existing custodians in the Competitor Cases. The vast bulk of documents requiring review are not hard copies of documents located in persons' files; instead, they are electronic documents that have to be downloaded en masse and then processed and reviewed for responsiveness. Most such documents prove to be non-responsive (in my experience, Microsoft custodians retain a large volume of electronic documents,

regardless of their subject), but that does not lessen the task and makes it all the more important that custodians be selected carefully.

6. Microsoft employs date ranges to capture documents in the agreed upon relevant time period, and search terms to capture potentially relevant electronic documents for review. The use of search terms is a standard practice in the review of electronic documents. The overwhelming majority of the documents that Microsoft collects are in electronic form (I estimate over 95%). After Microsoft collects these documents, it uses very broad search terms to identify those that require review for responsiveness. The search terms are calculated to capture all potentially responsive documents. They are intended to be, and are, over-inclusive. Microsoft has not and does not disclose its search terms, as they constitute work product. Every electronic document containing a search word "hit" is reviewed for responsiveness.

7. Microsoft has or will be searching for, collecting, reviewing, and producing documents from 131 custodians in response to the First Set of Joint Request for Production, and 66 custodians (64 individuals and 2 other sources) in response to Burst.com's Requests for Production. With respect to the 66 Burst custodians no documents were available for 13 former employees identified as custodians, and of the remaining 52 custodians, Microsoft has reviewed documents from 42 and produced those that are responsive. The remaining eleven include individuals who were recently added to the list of custodians based on Microsoft's ongoing investigation. Review and production of their documents is ongoing. Microsoft has reviewed millions of pages in response to these requests, and to date has produced over 600,000 pages of new productions in response to the Joint Requests, and 358,429 pages in response to Burst.com's individual Requests. This latter number includes over 194,400 pages of "new" production documents to Burst, as well as over 163,900 pages of "prior production" documents. Microsoft will produce additional documents in response to the

Second Set of Joint Requests for Production from additional custodians and Burst.com's Third Separate Requests for Production.

8. Jeffrey Friedberg, John Ludwig, and Jim Allchin are custodians in the Burst case. In addition, Marshall Brumer, Charles Fitzgerald, Kate Seekings, Ben Slivka, and Carl Stork were custodians in prior litigation and their prior production materials from the relevant period have been searched for responsive documents. Further, no responsive documents from the pertinent time period have been found for Khurshed Mazhar, Yves Michali, and Jay Torbog.

9. William Friedman and David del Val are former Microsoft employees who left Microsoft in approximately September 2000 and August 2000, respectively. Neither Messrs. Friedman or del Val were custodians in the Consumer Class Action cases, and Microsoft was under no obligation under the order in that case to retain their documents.

10. By June 20, 2003, Microsoft had produced 89% of its documents produced to date. Burst had produced 92% of its documents produced to date.

11. The overwhelming majority of potentially responsive documents have been collected and reviewed from the hard drives, email servers, file servers, hard copy, and archives of these custodians. The burden and expense of restoring backup tapes far outweighs the potentially limited amount of additional responsive documents that may exist in that form.

12. The process to review the documents on backup tapes is complex and takes months to execute. Several time consuming steps must be undertaken before the documents are even available for review. First, individual custodians from Microsoft must identify which file servers they used during the relevant time period because Microsoft does not keep a record of which custodian's files are located on which file

servers. Microsoft then must determine which backup tapes contain files from the identified file servers and then locate those tapes. After the back up tapes are located, Microsoft must determine whether a catalog of the content of the backup tapes currently exists or whether the catalog must be restored or recreated. A catalog can contain hundreds or thousands of directories and hundreds or thousands of files within each directory. The catalogs are not indexed by custodian and to find a particular file will require information from the particular custodian as to distinguishing names or other words in the file title. The catalogs are created monthly, and often contain duplicative material because the information on the file servers tends to remain largely the same over time.

13. Each file server contains material belonging to multiple custodians. Following the identification of the particular file servers and tapes and obtaining the catalogs of such tapes, Microsoft's attorneys must review the catalogs to identify the material belonging to the custodian. The catalogs must be reviewed manually, directory by directory and file name by file name within each directory to identify potentially relevant material by looking for initials, dates and other bits of information in individual file titles as clues as to whether the file belongs to the custodian and contains information requested by Burst. When potentially relevant directories have been identified in a catalog, these must be compared to other catalogs of the same file server from other months' backups to determine if they are duplicative. Even if certain directories contain a custodian's partial name or initials, they still must be compared to catalogs from other months to identify duplicates. There is substantial duplication between monthly backup tapes.

14. When non-duplicative directories have been identified, Microsoft has to restore the documents from the backup tapes. Once the documents have been restored,

they must be compared to the material previously collected to cull duplicate documents. Only then can the non-duplicative documents be reviewed for responsiveness.

15. Several years ago Microsoft attempted to retrieve documents from backup tapes for just three custodians. We found that because of the necessarily sequential and time consuming nature of the tasks that must be performed, the painstaking effort took several months and was enormously expensive. More important, because of the obvious fact that backup tapes substantially overlap and duplicate documents that have already been produced from the custodians' current materials, archived files, and Microsoft's retention libraries, more than 99% of the files identified as a result of searching the backup tapes duplicated materials on other tapes or documents that were already available from those sources.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

DATED this 12th day of August 2003.

Martha J. Dawson

EXHIBIT 24

DAVID T. MCDONALD (Wa. State Bar No. 5260)
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Filed Under Seal
Pursuant to Protective Order
"Confidential"

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

SUN MICROSYSTEMS, INC., a Delaware corporation,,

Plaintiff,

v.

MICROSOFT CORPORATION, a Washington corporation,,

Defendant.

CASE NO. C-97-20884 RMW (PVT) (ENE)

MICROSOFT'S OPPOSITION TO SUN'S MOTION TO COMPEL THE PRODUCTION OF BACKUP FILES

Hrg. Date: July 7, 1998
Time: 10:00 a.m.
Courtroom: Hon. Patricia V. Trumbull

INTRODUCTION

In this case, Microsoft has produced over 440,000 pages of responsive documents, including hundreds of email documents to, or from, Bill Gates ("Gates"), Jim Allchin ("Allchin") and Brad Silverberg ("Silverberg"). Microsoft produced these documents from the original files of its custodians. There is no reason now to expend the resources to search the backups for responsive documents. Plaintiff Sun Microsystems' ("Sun") Motion for an Order to compel the production of unspecified documents from backup tapes should be denied.

From backup tapes, Sun seeks documents "which were generated by or directed to Bill Gates, Jim Allchin and Brad Silverberg," or, in the event Microsoft can only title-search backup documents, all responsive documents stored on Microsoft's backup tapes. Sun's request dwarfs Microsoft's request for the email files of only three custodians—Sun seeks all email files generated by or directed to Gates, Allchin or Silverberg, regardless of the author, and, alternatively, all responsive documents stored on Microsoft's backup tapes.

Sun asks the Court to impose a heavy burden on Microsoft to produce—without a time limitation—documents from over 110,000 backup tapes even though Microsoft produced its responsive documents from the original files of the targeted individuals. Sun's basis for its request for this enormous additional undertaking is the conclusion that Gates, Allchin, and Silverberg had "crucial involvement in Microsoft's implementation of JAVA technology." Since Microsoft has produced responsive documents from the original files of these individuals, Sun's conclusionary assertion fails to provide grounds for forcing Microsoft to embark on the costly, cumbersome and burdensome additional steps of regenerating documents from backup tapes of the same sources. Indeed, Sun offers no evidence that any additional responsive documents even exist on the backup tapes or that Microsoft's search through original email files was inadequate.

STATEMENT OF FACTS

In an Order dated June 15, 1998, the Court granted Microsoft's Motion to Compel Sun's Production of E-Mail Files because, unlike Microsoft, Sun had not produced and, said it was unable to produce, responsive documents from the original files on the personal computers of key Sun employees. Sun employees routinely destroy their emails. As it is a matter of personal choice whether any original

email file is preserved, Microsoft requested documents on Sun's backup tapes to compensate for Sun's email destruction procedures. There are no original files to search because they have been systematically destroyed. In fact, Scott McNealy, Sun's CEO, conceded in his deposition that he continues to destroy emails. See McNealy Deposition 128:2-24.[1] Unlike Microsoft, Sun seeks the production of all "responsive" documents, which have already been produced from the original files, on backup tapes or, if withheld on privilege grounds, identified on Microsoft's privilege log.

To date, Microsoft has produced over 440,000 pages of responsive documents at a cost of over $1.5 million. Dawson Declaration ("Dawson Decl.") ¶ 2. Included in this production were hundreds of email documents to, or from, Gates, Allchin and Silverberg. Unlike Sun's production from its executives' files, Microsoft reviewed and produced all responsive email documents from the files of Gates, Allchin and Silverberg. Dawson Decl. ¶¶ 2, 3. The email files Microsoft has reviewed covered most or all of the entire time period of the parties' relationship:

Custodian	Date Range in Email File
Allchin	5/22/96-1/15/98
Gates	8/18/94-12/18/97
Silverberg	2/21/95-12/19/97

Dawson Decl. ¶ 3. By contrast, Sun conceded in its Opposition to Microsoft's Motion to Compel Production of Sun's Backup Email Files that Sun had several substantial gaps in its email production:

Sun's Custodian	Gaps In Sun's Production
McNealy	Missing November 1995
Baratz	Missing July 1996, October 1996, October 1997
Zander	Missing November 1995, December 1995, June 1996, August 1996

See Martinez Decl., ¶ 6; Vorres Decl., ¶ 6 to Sun's Opposition to Microsoft's Motion to Compel

[1] This testimony is attached as Exhibit A to the declaration of Kevin G. Montler in support of this Motion.

Production of Backup E-Mail Files.[2] Importantly, as the chart indicates, Sun failed to produce Baratz's email from October 1996, a month at the center of the parties' negotiations of the Technology License and Distribution Agreement.

Further, Microsoft's document retention and backup procedures make Sun's request for the backup tapes for emails and all other documents unduly burdensome and duplicative of documents already produced. Microsoft maintains 90 Exchange servers, which primarily contain email, and almost 1500 file servers, which contain email and other documents depending on the desktop profiles of individual users and the amount of free space for users on a server at any given time. Deposition of Mark Johnson ("Johnson Depo.") 12:19-13:19, 16:2-4.[3] Microsoft has no documentation reflecting whose documents occupy a given server, Johnson Depo. at 14:12-23 and, as a consequence, Microsoft has no centralized mapping system of its servers. Johnson Depo. at 11:2-23. Microsoft employees' files may be situated, without a time record, in various servers in Microsoft's network of 1600 servers. Johnson Depo. at 16:2-4. There is no way to identify any individual's "server history," and no way to locate an individual's previous servers after a move to a new server. Johnson Depo. at 19:19-24.

Microsoft "backs up" its Exchange servers with tapes that are recycled and overwritten every four weeks. Johnson Depo. 70:24 to 71:2, 72:13-23. Although Microsoft catalogs its servers, file-server catalogs are overwritten every three months, Johnson Depo. at 50:6-10, and Exchange-server catalogs are overwritten along with their source tapes. Johnson Depo. at 53:10 to 54:7. Thus, any discussion of email restoration is limited by this four-week time period (June 1998)—which, for the three targeted executives, has very little relevance to this action because all relevant events took place in 1995, 1996, and 1997.

The restoration process is further encumbered by the peculiarity of the Exchange backup software. In restoring Exchange tapes, the entire server must be restored, rather than an individual

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[2] Any documents that Sun has produced since filing its Opposition have been reflected in the chart—substantial gaps remain.

[3] This testimony is attached as Exhibit B to the declaration of Kevin G. Montler in support of this Motion.

account, because Exchange backup tapes contain only one large file under a general heading. Johnson Depo. 37:20-26, 39:9 to 40:14. In practical terms, someone would have to open every Exchange server's backup tape, and, document by document, open every file to identify the author. Johnson Depo. at 39:9 to 40:15. There is no way to perform a word search even after the documents are opened individually. Johnson Depo. at 40:9-15. To identify emails on backup tapes for the file servers, someone would have to search manually through 50 to 70 gigabytes of data in each directory—on tapes which may contain thousands of directories with thousands of files in each directory. Johnson Depo. at 61:21 to 62:24. Microsoft has already produced documents from the original files of each custodian's individual computer, so there is no need to conduct this duplicative search.

ARGUMENT

1. SUN'S REQUEST FOR DOCUMENTS FROM BACKUP TAPES SHOULD BE DENIED BECAUSE IT IS DUPLICATIVE AND UNDULY BURDENSOME.

A. Microsoft Has Already Produced Responsive Documents For Gates, Allchin And Silverberg From The Original Files.

Microsoft has already produced the responsive documents for Gates, Allchin and Silverberg from the original files. Dawson Decl. ¶ 3.[4] Sun's moving papers provide no grounds for Sun's speculation that any of these individuals has responsive documents on backup tapes which were not produced from the original files. Instead, Sun merely asserts that Gates, Allchin and Silverberg were "crucial" in Microsoft's implementation of JAVA technology. This unsupported assertion cannot justify dedicating thousands of search hours to regenerating and searching backup tapes for documents that Microsoft has already spent over $1.5 million to produce.

Microsoft has captured all original files from all or most of the entire time period of the parties' relationship. Dawson Decl. ¶ 3. Therefore, searching the backup tapes would be entirely duplicative of the search which has already been conducted – the documents have already been produced. See Fed. R. Civ. Proc. 26(b)(2)(i) (a court may limit discovery that is unreasonably

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[4] In its moving papers, Sun attempts to blur the distinction between its request for all documents on backup tapes on the one hand, and Microsoft's request for emails from backup tapes to fill in enormous gaps in Sun's production of documents from original files, on the other. Microsoft, unlike Sun, expended considerable resources to search personal computers to provide responsive documents.

cumulative or duplicative).

B. Sun's Request For The Production Of Documents From Backup Tapes Is Unduly Burdensome.

Microsoft's method of generating and storing documents on backup tapes is not conducive to searching narrowly for individual emails or documents. In order to regenerate and produce documents from backup tapes, Microsoft would have to dedicate thousands of search hours to search 1600 hundred servers, including over 110,000 tapes, essentially restoring every server and opening each document separately to review its contents. Moreover, Microsoft's backup email tapes are overwritten every four weeks. If Microsoft is ordered to restore backup emails for these three executives, it can only search for emails in the month of June 1998.

Sun fails to demonstrate that responsive documents have not already been produced or that responsive documents exist on backup tapes. Sun does not justify the burden of searching through thousands of backup tapes. See Fed. R. Civ. Proc. 26(b)(2)(iii) (a court may limit discovery when the burden or expense of the proposed discovery outweighs its likely benefits). See also Nortek, Inc. v. Pozzi, 1989 WL 131294 (D.Or.) (in which court denied motion to compel production of backup computer disks).[5]

CONCLUSION

For the foregoing reasons, Sun's Motion To Compel Production Of Microsoft's Backup Files should be denied.

Dated: July 1, 1998.

ORRICK, HERRINGTON & SUTCLIFFE LLP

Kevin G. Montler
Attorneys for Defendant
Microsoft Corporation

[5] This case is attached as Exhibit C to the declaration of Kevin G. Montler in support of this Motion.

EXHIBIT 25

Filed Under Seal

EXHIBIT 26

United States Department of Justice

Antitrust Division
Computers & Finance Section

Fax Number: 202-616-8544
Voice Number: 202-307-6147

FAX COVER SHEET

DATE: August 8, 1997

TO: David A. Heiner, Esq.

of: Microsoft Corp.

Fax Number: 206-869-1327

FROM: Kenneth W. Gaul

Pages Sent (including this sheet):

Remarks: Per our telephone discussion

Confidential

Antitrust Division

Bicentennial Building
600 E Street, NW
Washington, DC 20530

August 8, 1997

Via Facsimile and FedEx

David A. Heiner, Esq.
Microsoft Corporation
One Microsoft Way
Building Eight
Redmond, WA 98052-6399

Re: Civil Investigative Demand No. 16943

Dear Dave:

As we discussed, you have agreed to accept service via facsimile, with the original to follow via FedEx, of the above-referenced Civil Investigative Demand to Microsoft Corp.

After you have reviewed the Civil Investigative Demand, please feel free to call me at 202-307-6147 with any questions. Thank you for your cooperation.

Sincerely yours,

Kenneth W. Gaul

Kenneth W. Gaul
Attorney
Computers & Finance Section

enc.

United States Department of Justice

Antitrust Division
Washington, D.C. 20530

TO Microsoft Corporation
1 Microsoft Way
Redmond, WA 98052-6399
Attn: David A. Heiner, Esq.

Civil Investigative Demand No. 16943

This civil investigative demand is issued pursuant to the Antitrust Civil Process Act, 15 U.S.C. §§1311-1314, in the course of an antitrust investigation to determine whether there is, has been, or may be a violation of Sherman Act § 1, 15 U.S.C. § 1; Sherman Act § 2, 15 U.S.C. § 2, Clayton Act § 7, 15 U.S.C. § 18 by conduct, activities or proposed action of the following nature: Horizontal merger, monopolization of audio and video streaming software.

You are required by this demand to produce all documentary material described in the attached schedule that is in your possession, custody or control, and to make it available at your address indicated above for inspection and copying or reproduction by a custodian named below. You are also required to answer the interrogatories on the attached schedule. Each interrogatory must be answered separately and fully in writing, unless it is objected to, in which event the reasons for the objection must be stated in lieu of an answer. Such production of documents and answers to interrogatories shall occur on the 25th day of August, 19 97 at 10:00 a.m. p.m.

The production of documentary material and the interrogatory answers in response to this demand must be made under a sworn certificate, in the form printed on the reverse side of this demand, by the person to whom this demand is directed or, if not a natural person, by a person or persons having knowledge of the facts and circumstances relating to such production and/or responsible for answering each interrogatory.

For the purposes of this investigation, the following are designated as the custodian and deputy custodian(s) to whom the documentary material shall be made available and the interrogatory answers shall be submitted: John F. Greaney (Custodian); N. Scott Sacks (Deputy Custodian), U.S. Dept. of Justice, Antitrust Div., 600 E Street, N.W., Suite 9500, Washington D.C. 20530

Inquiries concerning compliance should be directed to Tracy Greer (202-616-5144)

Your attention is directed to 18 U.S.C. §1505, printed in full on the reverse side of this demand, which makes obstruction of this investigation a criminal offense.

Issued at Washington, D.C., this 8th day of August, 19 97

Acting Assistant Attorney General

MS-CC-BU 9001723

FORM ATR-174
APR-93

Confidential

18 U.S.C. §1505. Obstruction of proceedings before departments, agencies, and committees

"Whoever corruptly, or by threats of force, or by any threatening letter or communication, endeavors to influence, intimidate, or impede any witness in any proceedings pending before any department or agency of the United States, or in connection with any inquiry or investigation being had by either House, or any committee of either House, or any joint committee of the Congress; or

"Whoever injures any party or witness in his person or property on account of his attending or having attended such proceedings, inquiry, or investigation, or on account of his testifying or having testified to any matter pending therein; or

"Whoever, with intent to avoid, evade, prevent, or obstruct compliance, in whole or in part, with any civil investigative demand duly and properly made under the Antitrust Civil Process Act, willfully withholds, misrepresents, removes from any place, conceals, covers up, destroys, mutilates, alters, or by other means falsifies any documentary material, answers to written interrogatories, or oral testimony, which is the subject of such demand; or attempts to do so or solicits another to do so; or

"Whoever corruptly, or by threats or force, or by any threatening letter or communication influences, obstructs, or impedes or endeavors to influence, obstruct, or impede the due and proper administration of the law under which such proceeding is being had before such department or agency of the United States, or the due and proper exercise of the power of inquiry under which such inquiry or investigation is being had by either House, or any committee of either House or any joint committee of the Congress-

"Shall be fined not more than $5,000 or imprisoned not more than five years, or both."

Form of Certificate of Compliance*

I/We have read the provisions of 18 U.S.C. §1505 and have knowledge of the facts and circumstances relating to the production of the documentary material and have responsibility for answering the interrogatories propounded in Civil Investigative Demand No. _____ I/We do hereby certify that all documentary material and all information required by Civil Investigative Demand No. _____ which is in the possession, custody, or control of the person to whom the demand is directed has been submitted to a custodian named therein.

If any documentary material otherwise responsive to this demand has been withheld or any interrogatory in the demand has not been fully answered, the objection to such demand and the reasons for the objection have been stated in lieu of production or an answer.

Signature _____

Title _____

Sworn to before me this _____ day of

_____, 19 _____

MS-CC-BU 9001724

_____

Notary Public

Confidential

*In the event that more than one person is responsible for producing the documents and answering the interrogatories, the certificate shall identify the documents and interrogatories for

SCHEDULE

I. INSTRUCTIONS

1. The documents requested by this Schedule are documents in the possession, control, or custody of your company that were, unless otherwise specified or the context otherwise indicates, applicable, effective, prepared, written, sent, dated, or received at any time between January 1, 1996 and the date of your company's compliance with this Schedule.

2. After you have reviewed each request and determined what documents and information are available, the form in which they are available, and the extent of the search required to comply, we are prepared to discuss proposed modifications that will avoid unnecessary burdens on your company. For this purpose, or if you have any questions regarding the scope, meaning, or intent of this Civil Investigative Demand, please contact Tracy Greer at (202) 616-5144 for further information or explanation.

3. If information or documents responsive to this Schedule previously have been submitted by your company to the Antitrust Division and have not been returned to your company by the Antitrust Division (or destroyed by the Antitrust Division at your direction or pursuant to judicial order), you need not re-produce such information or documents. Please identify all information and documents previously produced, including the date of submission and the Bates number or other identification of where in that submission the information or documents can be found.

4. Preface each of your Interrogatory answers with the text of the request to which that answer responds. Where an Interrogatory includes subparagraphs (*e.g.*, a., b., c.), state the information called for in each subparagraph or subdivision separately.

5. Responses to this Schedule shall be submitted in the following manner:

a. If any portion of any document is responsive to any Document Request, then the entire document must be produced.

b. If the document contains privileged material, produce the entire document with the privileged material redacted or deleted, noting where redactions or deletions have been made to the document.

c. Documents produced pursuant to this Schedule shall be produced in the order in which they appear in your company's files and shall not be shuffled or otherwise rearranged. Documents that in their original condition were stapled, clipped, or otherwise fastened together shall be produced in such form.

d. Mark each page in an ink other than black with the initials "**MS8**" and number each page consecutively. Place these document control numbers at the lower

right-hand corner of each page, but do not place them so as to obscure any information on the document. If documents are shipped in boxes or other containers, number and mark each with the document control numbers contained therein.

e. Your company may submit photocopies (with color photocopies where necessary to interpret the original document) in lieu of original documents, provided that such copies are true, correct, and complete copies of the original documents.

6. If only a portion of an Interrogatory requests privileged material, respond to the rest of the Interrogatory. For each Interrogatory or portion thereof to which you refuse to provide an answer pursuant to any claim of privilege, submit a sworn or certified statement from your company's counsel or one of your company's officers setting forth the nature and basis for the privilege claimed.

7. For each document or portion thereof withheld under a claim of privilege, submit a sworn or certified statement from your company's counsel or one of your company's officers identifying the withheld document by author, addressee, date, number of pages, subject matter, and document control number; specifying the nature and basis of the claimed privilege and the paragraph of this Schedule to which the withheld material is responsive; and identifying each person to whom the withheld material was sent and each person to whom the withheld material or its contents, or any part thereof, was disclosed. Denote all attorneys identified with an asterisk.

8. No agreement or stipulation by the Department of Justice or any of its representatives purporting to modify, limit, or otherwise vary this Schedule shall be valid or binding on the Department of Justice unless confirmed or acknowledged in writing, or made of record in open court, by a duly authorized representative thereof.

II. DEFINITIONS

1. "And" and "or" are intended to have both conjunctive and disjunctive meanings.

2. "Document" means document as that term is used in the Federal Rules of Civil Procedure and should be understood to include all drafts of a document, the original or final draft, and any copies that differ in any way from the original (including any notations, underlining, or other markings), of any written, recorded or graphic material, whether prepared by you or by another person, that is in your possession, custody, or control. This includes memoranda, reports, records, letters, telegrams, electronic correspondence (such as electronic mail), notes, minutes, and transcripts of conferences, meetings, and telephone or other communications; transparencies, view-graphs, foils, slides, handouts, and multimedia presentations; contracts and other agreements; statements, ledgers, invoices, purchase orders, bills of lading, and other records of financial matters or commercial transactions; notebooks, scrapbooks, and diaries; plans and specifications; publications; published and unpublished

speeches or articles; photographs; diagrams, graphs, charts, sketches, and other drawings; photocopies, microfilm, and other copies or reproductions; audio and video recordings; tape, disk (including all forms of magnetic, magneto-optical, and optical disks), and other electronic recordings; financial models, statistical models, and other data compilations; and computer printouts. The term also includes information stored in, or accessible through, computer or other information retrieval systems, together with instructions and all other materials necessary to use or interpret such data compilations.

3. "Including" means "including, but not limited to."

4. "Identify" or "state the identity of" means, when used in reference to:

a. a natural person, his or her (i) full name; (ii) present or last known business address; (iii) present or last known business and home telephone numbers; (iv) present or last known legal employer, position or title, and general job description; and

b. a company, corporation, association, partnership, or other legal entity not a natural person, its: (i) full name; (ii) address of principal place of business; (iii) state of incorporation; (iv) telephone number.

5. "Microsoft," "you," or "your company" means Microsoft Corporation, each of its predecessors, successors, parents, divisions, subsidiaries, and affiliates, each other person or entity directly or indirectly, wholly or in part, owned or controlled by it, each partnership or joint venture to which any of them is a party, and all present and former officers, directors, employees, agents, consultants, or other persons acting for or on behalf of any of them.

6. "Progressive" means Progressive Networks, Inc., each of its predecessors, successors, parents, divisions, subsidiaries, and affiliates, each other person or entity directly or indirectly, wholly or in part, owned or controlled by it, each partnership or joint venture to which any of them is a party, and all present and former officers, directors, employees, agents, consultants, or other persons acting for or on behalf of any of them.

7. "Vxtreme" means Vxtreme, Inc., each of its predecessors, successors, parents, divisions, subsidiaries, and affiliates, each other person or entity directly or indirectly, wholly or in part, owned or controlled by it, each partnership or joint venture to which any of them is a party, and all present and former officers, directors, employees, agents, consultants, or other persons acting for or on behalf of any of them.

8. "VDOnet" means VDOnet Corporation, each of its predecessors, successors, parents, divisions, subsidiaries, and affiliates, each other person or entity directly or indirectly, wholly or in part, owned or controlled by it, each partnership or joint venture to which any of them is a party, and all present and former officers,

directors, employees, agents, consultants, or other persons acting for or on behalf of any of them.

9. "MCI" means MCI Communications Corporations, each of its predecessors, successors, parents, divisions, subsidiaries, and affiliates, each other person or entity directly or indirectly, wholly or in part, owned or controlled by it, each partnership or joint venture to which any of them is a party, and all present and former officers, directors, employees, agents, consultants, or other persons acting for or on behalf of any of them.

10. "Person" means any natural person, corporation, firm, company, sole proprietorship, partnership, joint venture, association, institute, or other business, legal, or governmental entity.

11. "Relating to" means discussing, describing, referring to, reflecting, containing, analyzing, studying, reporting on, commenting on, evidencing, constituting, setting forth, considering, recommending, concerning, or pertaining to, in whole or in part.

III. DOCUMENT REQUESTS

1. Submit one copy of each organization chart and personnel directory for each of the company's facilities or divisions involved in any activity relating to (i) NetShow; (ii) audio and video streaming technology or software; (iii) Microsoft's investment in Progressive and VDOnet; and (iv) Microsoft's acquisition of Vxtreme, supplemented by an identification that includes the last known business address of any of the personnel who are not currently employees of the company.

2. Submit all documents relating to the company's or any other person's plans relating to the investment of Microsoft in (i) Progressive; and (ii) VDOnet; and (iii) Microsoft's acquisition of Vxtreme, including, but not limited to, business plans, short term and long range strategies and objectives; budgets and financial projections; expansion or retrenchment plans; research and development efforts; and presentations to management committees, executive committees, and boards of directors. For regularly prepared budgets and financial projections, the company need only submit one copy of final year-end documents and cumulative year to date documents for the current year.

3. All documents relating to the valuation or market value of (i) Progressive; (ii) VDOnet; and (iii) Vxtreme or any of its intellectual property.

4. All documents relating to any patent rights held by (i) Progressive; (ii) VDOnet; and (iii) Vxtreme, or any patent applications filed by each company.

5. Submit all documents relating to the company's or any other person's plans relating to any business agreement with MCI, including, but not limited to, business plans, short term and long range strategies and objectives; budgets and financial projections; expansion or retrenchment plans; research and development efforts; and presentations to management committees, executive committees, and boards of directors. For regularly prepared budgets and financial projections, the company need only submit one copy of final year-end documents and cumulative year to date documents for the current year.

6. Submit all documents relating to competition in the development or sale of audio or video streaming technology or software, including, but not limited to, market studies, forecasts and surveys, and all other documents relating to

(a) the market share or competitive position of the company or any of its competitors;

(b) the relative strength or weakness of companies producing or selling audio or video streaming technology or software;

(c) supply and demand conditions;

(d) attempts to win customers from other companies and losses of customers to other companies;

(e) allegations by any person that any company that manufactures or sells audio or video streaming technology or software is not behaving in a competitive manner, including, but not limited to, customer and competitor complaints, threatened, pending, or completed lawsuits, and federal and state investigations; and

(f) any actual or potential effect on the supply, demand, cost or price of audio or video streaming technology or software as a result of competition from any other possible substitute software or technology.

7. All documents, prepared by or for Microsoft constituting, analyzing, commenting on, studying, or reviewing the effect of (i) Microsoft's investment in Progressive; (ii) Microsoft's investment in VDOnet; (iii) Microsoft's acquisition of Vxtreme; and (iv) any business agreement with MCI on competition in any market, including but not limited to any markets for:

(1) audio streaming technology;
(2) video streaming technology;
(3) videophone or videoconferencing technology;

(4). Web streaming technology;
(5) Web server software;
(6) operating system software (including MS-DOS (all versions), PC-DOS (all versions), Windows (all versions), Windows NT (all versions), and OS/2 (all versions); and
(7) the development of the Internet, the Internet as a market for software products and services, or Microsoft's competitive position as a provider of software products and services used in connection with the Internet.

8. All documents relating or referring to any plan, proposal, budget, study, or report relating to the development, marketing, or sale by Microsoft of audio or video streaming software, including but not limited to (i) Microsoft's NetShow; (ii) Microsoft's NetMeeting and (iii) Microsoft's investment and/or acquisition in Progressive, VDOnet, and VXtreme.

9. All documents relating or referring to any plan, proposal, budget, study, or report for discontinuing, replacing, modifying, or substituting audio or video streaming technology or software in (i) Microsoft's NetShow or (ii) Microsoft's NetMeeting with any software or technology marketed, developed, or owned by Progressive, VDOnet, or VXtreme.

10. Submit one copy of all current selling aids and promotional materials for (i) NetShow and (ii) NetMeeting.

11. All documents relating to the bundling, joint pricing, or technical integration of any audio or video streaming software with any Microsoft:

a. operating system software product, including but not limited to any operating system software product adapted for use with televisions, television set-top boxes, VCRs, digital video-disc (DVD), or telephones;

b. web server software, including but not limited to any web server software product adapted for use with televisions, television set-top boxes, VCRs, digital video-disc (DVD), or telephones;

c. web browser software, including but not limited to any web browser software product adapted for use with televisions, television set-top boxes, VCRs, digital video-disc (DVD), or telephones; or

d. any product designed to provide consumers with either an end-to-end solution or with any component or portion (including the

hardware platform, user interface, connection to the Internet, and access to Internet content) for access to the Internet using televisions, television set-top boxes, VCRs, digital video-disc (DVD) players, or telephones.

12. Submit all documents (except documents solely relating to environmental, tax, human resources, OSHA, or ERISA issues) relating to Microsoft's (i) investment in Progressive; (ii) investment in VDOnet; or (iii) acquisition of Vxtreme and provide:

(a) a detailed description of (including the identification of all documents directly or indirectly used to prepare the company's response to this sub-part and quantification, if possible, of all cost savings, economies or other efficiencies) the reasons for the investment or acquisition and the benefits, costs, and risks anticipated as a result of the investment or acquisition, including, but not limited to, all cost savings, economies, or other efficiencies of whatever kind; and

(b) Microsoft's Active Streaming Format or the Real Time Streaming Protocol ("RTSP").

13. Submit all documents (except documents solely relating to environmental, tax, human resources, OSHA, or ERISA issues) relating to any business agreement(s) with MCI and provide a detailed description of (including the identification of all documents directly or indirectly used to prepare the company's response to this sub-part and quantification, if possible, of all cost savings, economies or other efficiencies) the reasons for the business agreement and the benefits, costs, and risks anticipated as a result of the investment or acquisition, including, but not limited to, all cost savings, economies, or other efficiencies of whatever kind.

14. All documents that refer or relate to any agreements or business relationship between Progressive and WebTV Networks.

15. All documents that refer or relate to any agreements or business relationship between Microsoft, Progressive, and/or MCI.

16. All documents that refer or relate to any plans or strategies for integrating, converging, bundling or developing audio or video streaming technology or software with WebTV.

17. All documents that refer or relate to any plans or strategies for Microsoft's Active Streaming Format, including but not limited to any comparisons between or competition with the RTSP.

IV. INTERROGATORIES

1. Stated separately for the United States and worldwide for each of the years 1995 through second quarter of 1997, state your total revenues and total units sold for (i) NetShow and (ii) NetMeeting.

2. Identify each person within your company who was directly involved in the decision to invest in, or the negotiations with, (i) Progressive; (ii) VDOnet; (iii) Vxtreme. For each such person, describe fully that person's role and responsibilities with respect to the investment.

3. Identify the current employee(s) of your company most knowledgeable with respect to:

a. your company's decision to invest in and enter into any business agreements with Progressive;

b. your company's decision to invest in and enter into any business agreements with VDOnet;

c. your company's acquisition of and enter into any business agreements with VXtreme;

d. your company's decision to enter into any business agreements with MCI;

e. the development of NetShow and NetMeeting; and

f. the marketing or planned marketing of each of the following products: (i) NetShow, (ii) NetMeeting, and (iii) audio or video streaming technology.

4. Describe fully your company's future plans for (i) Real Audio; (ii) Real Video; (iii) RealPlayer; (iv) VDO Live; (v) VDO Phone; (vi) VideoPhone; (vii) Web Theatre; (viii) NetShow; (ix) NetMeeting; and (x) RealNetwork, (including but not limited to its anticipated pricing and any plan(s) for any technical or marketing integration or bundling of any of these products with any Microsoft product or with WebTV).

5. Identify each natural person responsible for preparing your company's response to this Schedule, and each instruction prepared by or on behalf of your company

relating to the steps taken to respond to this Schedule. Where oral instructions were given, provide a verified statement from the person who gave such instructions, detailing the instructions and identifying the persons to whom the instructions were given. For each paragraph of this schedule, identify each person who participated or assisted in the preparation of the response and list each office and person (identified by name and corporate title or job description) whose files were searched in responding to that item.

EXHIBIT 27

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff, v. MICROSOFT CORPORATION, Defendant.	Civil Action No. 98-1232 (TPJ)
STATE OF NEW YORK, ex rel. Attorney General ELIOT SPITZER, et al., Plaintiffs and Counterclaim-Defendants, v. MICROSOFT CORPORATION, Defendant and Counterclaim-Plaintiff.	Civil Action No. 98-1233 (TPJ)

FINDINGS OF FACT

These consolidated civil antitrust actions alleging violations of the Sherman Act, §§ 1 and 2, and various state statutes by the defendant Microsoft Corporation, were tried to the Court, sitting without a jury, between October 19, 1998, and June 24, 1999. The Court has considered the record evidence submitted by the parties, made determinations as to its relevancy and materiality, assessed the credibility of the testimony of the witnesses, both written and oral, and

not run properly on Apple's media player, and content developed with Apple's tools would not run properly on Microsoft's media player. If, as it implied it was willing to do, Microsoft then bundled its media player with Windows and used a variety of tactics to limit the distribution of Apple's media player for Windows, it could succeed in extinguishing developer support for Apple's multimedia technologies. Indeed, as the Court discusses in Section VI of these findings, Microsoft had begun, in 1996, to use just such a strategy against Sun's implementation of the Java technologies.

108. The discussions over multimedia playback software culminated in a meeting between executives from Microsoft and Apple executives, including Apple CEO, Steve Jobs, at Apple's headquarters on June 15, 1998. Microsoft's objective at the meeting was to secure Apple's commitment to abandon the development of multimedia playback software for Windows. At the meeting, one of the Microsoft executives, Eric Engstrom, said that he hoped the two companies could agree on a single configuration of software to play multimedia content on Windows. He added, significantly, that any unified multimedia playback software for Windows would have to be based on DirectX. If Apple would agree to make DirectX the standard, Microsoft would be willing to do several things that Apple might find beneficial. First, Microsoft would adopt Apple's ".MOV" as the universal file format for multimedia playback on Windows. Second, Microsoft would configure the Windows Media Player to display the QuickTime logo during the playback of ".MOV" files. Third, Microsoft would include support in DirectX for QuickTime APIs used to author multimedia content, and Microsoft would give Apple appropriate credit for the APIs in Microsoft's Software Developer Kit.

405. In November 1995, Microsoft's Paul Maritz told a senior Intel executive that Intel's optimization of its multimedia software for Sun's Java standards was as inimical to Microsoft as Microsoft's support for non-Intel microprocessors would be to Intel. It was not until 1997, though, that Microsoft prevailed upon Intel to not support Sun's development of Java classes that would have allowed developers to include certain multimedia features in their Java applications without sacrificing portability.

406. In February 1997, one of Intel's competitors, called AMD, solicited support from Microsoft for its "3DX" technology, which provided sophisticated multimedia support for games. Microsoft's Allchin asked Gates whether Microsoft should support 3DX, despite the fact that Intel would oppose it. Gates responded: "If Intel has a real problem with us supporting this then they will have to stop supporting Java Multimedia the way they are. I would gladly give up supporting this if they would back off from their work on JAVA which is terrible for Intel." Near the end of March, Allchin sent another message to Gates and Maritz. In it he wrote, "I am positive that we must do a direct attack on Sun (and probably Oracle). . . . Between ourselves and our partners, we can certainly hurt their (certainly Sun's) revenue base. . . . We need to get Intel to help us. Today, they are not." Two months later, Eric Engstrom, a Microsoft executive with responsibility for multimedia development, wrote to his superiors that one of Microsoft's goals was getting "Intel to stop helping Sun create Java Multimedia APIs, especially ones that run well (ie native implementations) on Windows." Engstrom proposed achieving this goal by offering Intel the following deal: Microsoft would incorporate into the Windows API set any multimedia interfaces that Intel agreed to not help Sun incorporate into the Java class libraries. Engstrom's

efforts apparently bore fruit, for he testified at trial that Intel's IAL subsequently stopped helping Sun to develop class libraries that offered cutting-edge multimedia support.

D. The Effect of Microsoft's Efforts to Prevent Java from Diminishing the Applications Barrier to Entry

407. Had Microsoft not been committed to protecting and enhancing the applications barrier to entry, it might still have developed a high-performance JVM and enabled Java developers to call upon Windows APIs. Absent this commitment, though, Microsoft would not have taken efforts to maximize the difficulty of porting Java applications written to its implementation and to drastically limit the ability of developers to write Java applications that would run in both Microsoft's version of the Windows runtime environment and versions complying with Sun's standards. Nor would Microsoft have endeavored to limit Navigator's usage share, to induce ISVs to neither use nor distribute non-Microsoft Java technologies, and to impede the expansion of the Java class libraries, had it not been determined to discourage developers from writing applications that would be easy to port between Windows and other platforms. Microsoft's dedication to the goal of protecting the applications barrier to entry is highlighted by the fact that its efforts to create incompatibility between its JVM and others resulted in fewer applications being able to run on Windows than otherwise would have. Microsoft felt it was worth obstructing the development of Windows-compatible applications where those applications would have been easy to port to other platforms. It is not clear whether, absent Microsoft's interference, Sun's Java efforts would by now have facilitated porting between Windows and other platforms enough to weaken the applications barrier to entry. What

toward Netscape, IBM, Compaq, Intel, and others, Microsoft has demonstrated that it will use its prodigious market power and immense profits to harm any firm that insists on pursuing initiatives that could intensify competition against one of Microsoft's core products. Microsoft's past success in hurting such companies and stifling innovation deters investment in technologies and businesses that exhibit the potential to threaten Microsoft. The ultimate result is that some innovations that would truly benefit consumers never occur for the sole reason that they do not coincide with Microsoft's self-interest.

/s/
Thomas Penfield Jackson
U.S. District Judge

Date: November 5, 1999

EXHIBIT 28

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff,	)	
vs.	)	No. CIV 98-1232 (TPJ)
MICROSOFT CORPORATION, Defendant.	)	CONFIDENTIAL
STATE OF NEW YORK, ex rel, ATTORNEY GENERAL DENNIS C. VACCO, et al.,	)	No. CIV 98-1233 (TPJ)
vs.	)	
MICROSOFT CORPORATION, Defendant.	)	

DEPOSITION OF ERIC ENGSTROM, a witness herein, taken on behalf of the plaintiffs, at 9:11 a.m., Monday, September 28, 1998, at 1701 Pennsylvania Avenue, N.W., Suite 700, Washington D.C., California, before Georgette L. Urbano, CSR, RPR, pursuant to subpoena.

REPORTED BY:
Georgette Urbano,
CSR 8747
Our File No. 1-49826

A I haven't gotten any.
Q Okay. Are you aware of anyone else searching your documents --
A No.
Q -- before that? Okay.
A I did get a request once not to -- you know, make sure mail of a certain time was not deleted.
Q Do you remember when that was?
A No. I wasn't involved in any -- it was a -- I was added to the mail for reasons, I think, of thoroughness. The topic in the mail I've never heard of; so I paid no attention to it, but I tell you that in the interest of thoroughness.
Q I appreciate that.
What -- do you retain your -- what's your policy with regard to E-mail retention?
A I tend to remove E-mail off my machine after approximately two months. I have a laptop I do all my work off of, and two things happen. I search my mail frequently, and I get a very large amount of mail; so the product simply slows to a crawl if I don't do that.
Q And do you go through and delete them one by one or do you have an automatic delete?

A What I do is every month I go mark all the ones from the last month and just whack them.

Q So there is no automatic delete on your system?

A No.

MR. COVE: Okay. Let's go off the record.

THE VIDEOGRAPHER: This ends Tape No. 1. We're off the record. 11:27:57.

(Break.)

THE VIDEOGRAPHER: This begins tape No. 2. The time on the screen is 11:45:21. We're on the record.

Q BY MR. COVE: Mr. Engstrom, earlier you testified that Microsoft's multimedia architecture was extensible. And is that extensible by means of APIs that Microsoft exposes to third parties?

A Yes.

Q Has anyone at Microsoft ever discussed with you whether or not it is important to control the multimedia streaming APIs?

MR. EDELMAN: Object to the form.

THE WITNESS: Streaming APIs?

Q BY MR. COVE: Well, the APIs that are used for multimedia functionality?

I hereby declare, under penalty of perjury, that the foregoing answers are true and correct to the best of my knowledge and belief.

EXECUTED AT_____, CALIFORNIA, this_____day of_____, 1998.

_____
ERIC ENGSTROM

EXHIBIT 29

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, PLAINTIFF, V. MICROSOFT CORPORATION, DEFENDANT.	C.A. NO. 98-1232
STATE OF NEW YORK, ET AL., PLAINTIFFS, V. MICROSOFT CORPORATION, DEFENDANT.	C.A. NO. 98-1223
MICROSOFT CORPORATION, COUNTERCLAIM-PLAINTIFF, V. DENNIS C. VACCO, ET AL., COUNTERCLAIM-DEFENDANTS.	WASHINGTON, D.C. FEBRUARY 23, 1999 2:09 P.M. (P.M. SESSION)

VOLUME 59

TRANSCRIPT OF TRIAL
BEFORE THE HONORABLE THOMAS P. JACKSON
UNITED STATES DISTRICT JUDGE

CONVERSATION, IT WAS AN E-MAIL.

Q. SO, IN EACH OF THE CASES WHERE YOU REPORTED ON A MEETING OR A CONVERSATION, YOU WOULD HAVE SENT AN E-MAIL TO YOUR SUPERIORS AT MICROSOFT; CORRECT?

A. YES, BEYOND, YOU KNOW, "MET WITH APPLE YESTERDAY; IT WAS FINE."

Q. IF IT WAS JUST THAT, YOU WOULD DO IT ORALLY. IF IT WAS SOMETHING MORE, YOU WOULD SEND AN E-MAIL?

A. YES, THAT'S TRUE. I WAS JUST TRYING TO BE VERY CLEAR.

Q. I APPRECIATE THAT.

NOW, MR. ENGSTROM, AT SOME POINT YOU DELETED ALL OF YOUR E-MAILS RELATING TO ANY CONVERSATIONS OR MEETINGS THAT YOU HAD WITH APPLE THAT OCCURRED PRIOR TO THE END OF MAY OF 1998; CORRECT?

A. NO. WHAT I DO IS I DELETE MAIL THAT IS TWO MONTHS OLD ON A REGULAR BASIS BECAUSE I WORK ON A HARD DISK ON A LAPTOP. THE MACHINE IS FAIRLY OLD, THE REASON FOR THAT BEING I TEND TO TEST THE SOFTWARE MY GROUP IS PRODUCING, AND I LIKE TO MAKE SURE THAT IT RUNS ON WHAT A CUSTOMER'S MACHINE IS TYPICALLY TO BE. SO, AS A ROUTINE BASIS, I DELETE ALL MAIL, YOU KNOW, TWO MONTHS OLD.

Q. IT'S THE CASE, ISN'T IT, THAT NO E-MAIL AUTHORED BY YOU THAT REPORTS ON ANY MEETINGS OR ANY CONVERSATIONS WITH APPLE BEFORE THE END OF MAY 1998 WAS PRODUCED TO THE

CERTIFICATE OF REPORTER

I, DAVID A. KASDAN, RMR, COURT REPORTER, DO HEREBY TESTIFY THAT THE FOREGOING PROCEEDINGS WERE STENOGRAPHICALLY RECORDED BY ME AND THEREAFTER REDUCED TO TYPEWRITTEN FORM BY COMPUTER-ASSISTED TRANSCRIPTION UNDER MY DIRECTION AND SUPERVISION; AND THAT THE FOREGOING TRANSCRIPT IS A TRUE RECORD AND ACCURATE RECORD OF THE PROCEEDINGS.

I FURTHER CERTIFY THAT I AM NEITHER COUNSEL FOR, RELATED TO, NOR EMPLOYED BY ANY OF THE PARTIES TO THIS ACTION IN THIS PROCEEDING, NOR FINANCIALLY OR OTHERWISE INTERESTED IN THE OUTCOME OF THIS LITIGATION.

_____

DAVID A. KASDAN

EXHIBIT 30

SULLIVAN & CROMWELL LLP

TELEPHONE: 1-212-558-4000
FACSIMILE: 1-212-558-3588
WWW.SULLCROM.COM

125 Broad Street
New York, NY 10004-2498

LOS ANGELES • PALO ALTO • WASHINGTON, D.C.
FRANKFURT • LONDON • PARIS
BEIJING • HONG KONG • TOKYO
MELBOURNE • SYDNEY

October 11, 2004

Via Facsimile

Spencer Hosie,
Hosie Frost Large & McArthur,
1 Market Street,
Spear Street Tower, 22nd Floor,
San Francisco, California 94105.

Re: Burst v. Microsoft

Dear Spencer:

This letter responds to your e-mails to Mr. Treece and Ms. Harris, and your October 7 letter to me, regarding whether Microsoft "purged" or destroyed documents from Mr. Engstrom's and Mr. Phillips's files. During the DOJ litigation, certain documents from the relevant timeframe were collected from both Messrs. Engstrom and Phillips. Those files have been preserved since their collection dates. Moreover, those files were reviewed for responsive documents in a number of matters, including the DOJ and Burst cases, and responsive documents were produced. (You might wish to refer, for example, to Mr. Phillips' October 14, 1998 deposition, at pp. 93-95.)

Thus, Microsoft did not destroy all the "Engstrom and Phillips documents when both left Microsoft in 1999." All documents that had been collected in connection with pending litigation were then, and have always been, preserved. As you know, other

documents, including documents that may have resided on a computer hard drive when those employees left the firm, may not have been retained because, at the time, the company had no business or legal obligation to retain them.

Sincerely,

David Tulchin

cc: John Treece
Michael Brockmeyer

EXHIBIT 31

SIDLEY AUSTIN BROWN & WOOD

DALLAS
LOS ANGELES
NEW YORK
SAN FRANCISCO
WASHINGTON, D.C.

BANK ONE PLAZA
10 S. DEARBORN STREET
CHICAGO, ILLINOIS 60603
TELEPHONE 312 853 7000
FACSIMILE 312 853 7036
www.sidley.com

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GENEVA
HONG KONG
LONDON
SHANGHAI
SINGAPORE
TOKYO

WRITER'S DIRECT NUMBER
(312) 853-4663

WRITER'S E-MAIL ADDRESS
svharris@sidley.com

May 30, 2003

Via Facsimile and U.S. Mail

Spencer Hosie
Hosie Frost Large & McArthur
1 Market Street
Spear Street Tower, 22nd Floor
San Francisco, California 94105

Re: Burst.com v. Microsoft Corporation

Dear Spencer:

In response to your request and as promised in our telephone call on Tuesday, May 27, enclosed is a preliminary list of "custodians." Inclusion of a custodian's name on the list, however, does not necessarily mean that responsive documents were found in his or her files. As John stated on our call, the enclosed list is not complete. In addition, the list does not include the names of custodians whose files were searched in response to document requests in other cases that were substantially similar to Burst's RFPs. Responsive documents produced from certain of those custodians' files will additionally be produced to Burst.

In addition to the custodians on the enclosed list, Microsoft has reviewed information about a number of former employees to determine whether any of their documents were archived when they left the company. As a result of that review, Microsoft believes to the best of its knowledge that documents for the following individuals were not archived:

Tom Brown (Software Developer, Windows Media Platform Development, Streaming Media Division)
Siddhartha Debgupta (Software Developer, Windows Media Platform Development, Streaming Media Division)
David del Val (Development Lead, Windows Media Platform Development, Streaming Media Division)
Jim Durkin
Craig Eisler (General Manager, Streaming Media Server)
Patrick Ford
Will Friedman (Business Development Manager, Digital Media Division)

Ajay Jindal (Lead Program Manager, Windows Media Platform Program Management, Streaming Media Division)
Frasier Mocke
Peter Moutanos
Hermanth Ravi (Software Developer, Windows Media Platform Development, Streaming Media Division)
Rick Segal

Finally, note that the attached list does not include the names of custodians whose documents were reviewed in the context of the competitor plaintiffs' joint requests to produce.

Sincerely,

Susan V. Harris

Susan V. Harris

Encl.

cc: John Treece

EXHIBIT 32

BURST - MICROSOFT E-MAIL CORRESPONDENCE NOT PRODUCED BY MICROSOFT (111)

9/28/99 14:38
10/4/99 15:14
10/4/99 16:40
10/6/99 12:30
10/7/99 12:25
10/7/99 16:47
10/7/99 17:34
10/7/99 17:46
10/7/99 17:50
10/18/99 15:26
10/19/99 11:13
10/21/99 9:21
10/21/99 23:14
11/18/99 16:36
11/29/99 14:57
11/29/99 15:15
12/3/99 15:46
12/3/99 17:02
12/20/99 18:50
12/21/99 10:11
12/24/99 15:15
12/26/99 21:07
1/6/00 14:32
1/10/00 11:47
1/11/00 10:34
1/12/00 15:29
1/19/00 2:15
1/25/00 11:48
3/20/00 14:10
3/27/00 12:45
4/4/00 16:04
4/7/00 18:47
4/23/00 21:52
4/26/00 9:51
4/26/00 17:03
5/2/00 10:45
5/2/00 11:27
5/4/00 20:52
5/5/00 13:11
5/8/00 10:09
5/8/00 10:35
5/8/00 16:44
5/8/00 17:25
5/9/00 14:54
5/9/00 15:08
5/9/00 15:23
5/15/00 20:49
5/15/00 21:05
5/16/00 17:15
5/18/00 6:06
5/23/00 20:27
5/23/00 20:28
5/23/00 20:31
5/23/00 20:48
5/24/00 18:00
5/24/00 19:09
5/25/00 18:35
5/25/00 21:40
5/25/00 22:15
5/26/00 18:23
5/30/00 14:42
5/30/00 15:53
6/1/00 19:46
6/2/00 17:39
6/4/00 18:48
6/6/00 6:34
6/6/00 12:01
6/6/00 12:56
6/9/00 11:11
6/9/00 11:14
6/21/00 0:24
6/21/00 6:59
6/21/00 10:36
6/21/00 10:39
7/17/00 8:51
7/18/00 21:23
7/18/00 21:24
7/20/00 12:12
7/20/00 15:54
7/20/00 17:40
7/20/00 17:44
7/24/00 9:11
7/24/00 14:54
7/24/00 15:55
7/24/00 16:34
7/24/00 16:37
7/27/00 17:30
7/28/00 12:54
7/28/00 13:13
7/28/00 16:48
7/30/00 10:17
7/30/00 16:16
8/1/00 16:01
8/1/00 16:30
8/1/00 16:57
8/1/00 17:05
8/3/00 21:18
8/4/00 11:43
8/4/00 17:16
8/7/00 10:04
8/8/00 8:37
8/8/00 16:50
8/22/00 13:54
10/4/00 17:08
2/6/01 10:26
2/8/01 8:08
2/8/01 13:27
2/8/01 13:34
2/11/01 16:04
2/12/01 14:31
2/13/01 8:09

EXHIBIT 33

Microsoft Privilege Log

Burst v. Microsoft

(updated electronic document privilege log)

Preston|Gates|Ellis LLP

Bates Range	Date	Privilege	Subject Matter	Names
PMS-CC-Bu 036406 -036407	12/07/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portions of email thread containing and requesting legal advice in anticip ation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270938-270939.	Recipient Weresh, John - Microsoft (LCA) - Attorney Author Eppenauer, Bart - Microsoft (LCA) - Attorney Custodian Weresh, John - Microsoft (LCA) - Attorney Name in Email Thread Bawcutt, Tony - Microsoft Beckerman, Mike - Microsoft Brunell, Brad - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Poole, Will - Microsoft Schiefelbein, Bill - Microsoft
PMS-CC-Bu 036408 -036410	12/13/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portions of email thread marked Attorney-Client Privileged containing and requesting legal advice in anticipation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270940-270942.	Recipient Eppenauer, Bart - Microsoft (LCA) - Attorney Author Weresh, John - Microsoft (LCA) - Attorney Custodian Weresh, John - Microsoft (LCA) - Attorney Name in Email Thread Bawcutt, Tony - Microsoft Beckerman, Mike - Microsoft Brunell, Brad - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Poole, Will - Microsoft Schiefelbein, Bill - Microsoft
PMS-CC-Bu 036411 -036412	12/07/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portion of email requesting legal advice in anticipation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270943-270944.	Recipient Poole, Will - Microsoft Author Bawcutt, Tony - Microsoft Copyee Beckerman, Mike - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Schiefelbein, Bill - Microsoft Weresh, John - Microsoft (LCA) - Attorney Custodian Weresh, John - Microsoft (LCA) - Attorney

Microsoft Privilege Log

Burst v. Microsoft

(updated electronic document privilege log)

Preston|Gates|Ellis LLP

Bates Range	Date	Privilege	Subject Matter	Names
PMS-CC-Bu 036413 -036414	12/07/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portions of email thread requesting legal advice in anticipation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270945-270946.	Recipient Bawcutt, Tony - Microsoft Eppenauer, Bart - Microsoft (LCA) - Attorney Author Poole, Will - Microsoft Copyee Beckerman, Mike - Microsoft Brunell, Brad - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Schiefelbein, Bill - Microsoft Weresh, John - Microsoft (LCA) - Attorney Custodian Weresh, John - Microsoft (LCA) - Attorney
PMS-CC-Bu 036415 -036417	12/12/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portions of email thread requesting legal advice in anticipation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270947-270949.	Recipient Bawcutt, Tony - Microsoft Eppenauer, Bart - Microsoft (LCA) - Attorney Poole, Will - Microsoft Author Schiefelbein, Bill - Microsoft Copyee Beckerman, Mike - Microsoft Brunell, Brad - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Weresh, John - Microsoft (LCA) - Attorney Custodian Weresh, John - Microsoft (LCA) - Attorney
PMS-CC-Bu 036418 -036420	12/13/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portions of email thread marked Attorney-Client Privileged requesting legal advice in anticipation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270950-270952.	Recipient Eppenauer, Bart - Microsoft (LCA) - Attorney Author Poole, Will - Microsoft Copyee Bawcutt, Tony - Microsoft Beckerman, Mik e - Microsoft Brunell, Brad - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Schiefelbein, Bill - Microsoft Weresh, John - Microsoft (LCA) - Attorney Custodian Weresh, John - Microsoft (LCA) - Attorney

Microsoft Privilege Log

Burst v. Microsoft

(updated electronic document privilege log)

Preston|Gates|Ellis LLP

Bates Range	Date	Privilege	Subject Matter	Names
PMS-CC-Bu 036421 -036423	12/13/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portions of email thread marked Attorney-Client Privileged containing and requesting legal advice in anticipation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270953-270955.	Recipient Weresh, John - Microsoft (LCA) - Attorney Author Eppenauer, Bart - Microsoft (LCA) - Attorney Custodian Weresh, John - Microsoft (LCA) - Attorney Name in Email Thread Bawcutt, Tony - Microsoft Beckerman, Mike - Microsoft Brunell, Brad - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Poole, Will - Microsoft Schiefelbein, Bill - Microsoft
PMS-CC-Bu 036424 -036426	12/20/2000	Attorney-Client Privilege / Work Product / Portion Redacted	Portions of email thread marked Attorney-Client Privileged requesting and containing legal advice in anticipation of litigation re: Burst patent meeting. Produced as MS-CC-Bu 270956-270958.	Recipient Eppenauer, Bart - Microsoft (LCA) - Attorney Poole, Will - Microsoft Weresh, John - Microsoft (LCA) - Attorney Author Bawcutt, Tony - Microsoft Copyee Beckerman, Mike - Microsoft Brunell, Brad - Microsoft Buecheler, Kurt - Microsoft Donka, Pat - Microsoft Schiefelbein, Bill - Microsoft Custodian Weresh, John - Microsoft (LCA) - Attorney
PMS-CC-Bu 036427 -036464	11/04/2002	Attorney-Client Privilege / Portion Redacted	Draft presentation marked Attorney-Client Privileged prepared with the assistance of Legal subject to legal review/revision re: F4 licensing. Produced as MS-CC-Bu 270959-270996.	Author Knowlton, Chadd - Microsoft Microsoft Legal Custodian Bawcutt, Tony - Microsoft
PMS-CC-Bu 036465 -036467	12/13/2001	Attorney-Client Privilege / Portion Redacted	Email thread requesting legal advice re: NEC agreement. Produced as MS-CC-Bu 271070-271072.	Recipient Briskorn, Mike - Microsoft Author Lockard, Tristan - Microsoft Copyee Cutter, Brooks - Microsoft Limberis, Alex - Microsoft Quintanar, Carrie - Preston Gates Ellis - Outside Counsel Custodian Cutter, Brooks - Microsoft

EXHIBIT 34

7/6/00

Burst Mtg Bill

→ Burst.com
- alt. form streaming
- Burst is way to go.
- Fill Buffer on client.
- keep it full.
- not http Based. (not port 80)
- working on http version.
- cable/Broad

◦ WM Bad accross cable modem.
prone to data loss.
- Needs to be retransmitted.
- ~~cached~~ c

→ cache up

WMT; I Frame only,

Burst

◦ excite@home } Better than WM.
- Yahoo.
- AOL spinner }

- Patent review - no problem for issued vs. filed.

- Low latency startup. - real (5.0+)

~~- Profile~~

- WM = 5 sec Buffering

- 6.4 player w/ prop. protocols
  - ASFStream DShow filter
  - http svr - Bind -
  - Feeding
  - "cougar server"
  - VBricast server
  - seeking + ff/rw
- asked to ship plugin
- V7 players do not want old dshow filter (can't hold support. all codecs)
- Nice if there - with burst.
- new V7 Plugin with "src" plugin - simplistic

- Sent Burst down road for possibility.
  - prohibited
  - cannot wrap WMF in another protocol
  - in violation of agreement

- asp based server model –
  - Linux servers.
  - reseller partnership

"WM from Linux server."

- recourse
  - what would they like:
    - ship support for tech in player
    - for reach.

pitch – Better experience for end users
- may move more to WM if we do this.

- advertisement w/ Real.
- have not made it yet

- Make $ running services
- IP house - /patent portfolio
  - on NPK
- if nobody distributes, ...
- if cannot stream reals + WM, who? QT?
- Licenses to others - short term
  - acquisitions
- prior art.
  - progressive download?
  - write own patents.

Privileged

- MS
- QNST doesn't realize they cannot do what they want to do.

[Not competitive today]

[real has protocol for plugin in client/server.]

- Build buffering w/ SDK.
- If we HTTP + talk to server --
- own buffers -

- Bursting is good (better experience) — client on cable — Linux → own windows player
- We Don't like it since not exclusive. ↦ maintain par.
- push them away (can't do that) — improve other platforms.
NO - license

- will be adding our own method.
- wait for contract. (acquisition path)

. Don't like it because: issue (Osbaudt)

. [Don't want to explode Format — (around the side)]

. allows non windows servers (eg. Linux)
. (not exclusive method to windows WM.)

[Friend or Foe]

• validation Burst –
makes it hard for
other Friends.

80 people

– Show side of agreement issue?
→ WMS security mechanism.

• go Radio / disney
showcast – people screwing up.

real / MP3 / QT.

A possible workaround?
"wrap media content."

cable modem scenario w/
whistler.

Overall: good for user -

have to implement

- Don't

Want same ability to play back on any ~~system~~ content.

Got a goal to maintain PC on Linux

+ operational expense for subclass of content.
+ can't ignore us - will have plenty of content.

+ Fallout / Catch it today / Tomorrow.

dipl.

~~Citrus test:~~
- our player has to play it back.

encapsulate: prevent real from wrapping WM content

- any app can read stream. (should be able to)

Lotus ... cross walks

EXHIBIT 35

From: Bill Schiefelbein [billsch@microsoft.com]
Sent: Tuesday, November 21, 2000 8:52 AM
To: Tony Bawcutt; Mike Beckerman
Cc: Chadd Knowlton; zz-Eppenauer, Bart (MS)
Subject: RE: Burstware: my quick take on yesterday's meeting

Send the eval software to Troy Batterberry. Question though...are there any strings or concerns attached to looking at/using this eval tool?

Bill

-----Original Message-----
From: Tony Bawcutt
Sent: Monday, November 20, 2000 9:28 AM
To: Bill Schiefelbein; Mike Beckerman
Cc: Chadd Knowlton; Bart Eppenauer (LCA)
Subject: RE: Burstware: my quick take on yesterday's meeting

I have the evaluation software they left in the meeting.

To whom should I be sending it?

Mike's calendar is blocked solid this week. Is he in and available for a meeting on this, or is he gone?

-----Original Message-----
From: Bill Schiefelbein
Sent: Sunday, November 19, 2000 5:58 PM
To: Mike Beckerman; Tony Bawcutt; Bart Eppenauer (LCA)
Cc: Chadd Knowlton
Subject: RE: Burstware: my quick take on yesterday's meeting

ATTORNEY-CLIENT PRIVILEGED COMMUNICATION
Privileged

Privileged

-----Original Message-----

From: Mike Beckerman

Sent: Saturday, November 18, 2000 10:14 AM

To: Tony Bawcutt; Bill Schiefelbein

Cc: Chadd Knowlton

Subject: Burstware: my quick take on yesterday's meeting

Bottom line, they're dying, and even CEO Doug didn't have the gumption to come right out and say that they wanted to be acquired, probably because it makes them look even more desperate. Given their assets and market cap, acquisition for anything other than IP doesn't seem to provide much value.

I haven't read the performance report they gave us, but let's just take it on face value that they really do utilize bandwidth better than WMT alone. Since they've dumped all of their engineers except for two, there's not much in the way of SDE talent that we would get out of an acquisition. So it net it out to their patents (which, Bill, I believe has been your position for a while now.)

So I see it somewhat as a cross between a game of chicken, and a calculated risk as to how we proceed with our own engineering efforts. Given that they have 32 issued patents, we should be able to have Legal look at those independently and give us an assessment of if we do or do not have a future exposure against those.

With a current market cap of just over $9M and with them asking for at least $5M inflow from MS, acquisition would be the only thing that makes sense in terms of the $ involved-we'd acquire the IP, incorporate it into WMT, and anything else would be closed out. We'd of course look to see if there are people in the org that might make sense in MS, both the two engineers, and the others in different capacities. But my guess is that the offer and retention rate will be quite low.

On the chicken-side of things, with only 45 days of cash left, and with apparently only questionable additional funding available after that for a couple months more, we could wait this out and potentially license / acquire their IP at a much lower level of expense.

Tony, Bill, you're initial thoughts?

EXHIBIT 36

[redacted]

CERTIFIED COPY

MILLER & COMPANY
REPORTERS

THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP. ANTITRUST LITIGATION.	
This Document relates to:	MDL Docket No. 1332 Hon. J. Frederick Motz
BURST.COM, INC., v. MICROSOFT CORP.	
Civil Action No. JFM-02-cv-2952	

DEPOSITION OF: Bill Schiefelbein

TAKEN ON: September 19, 2003

NO. 10633 REPORTED BY: CHIA MEI JUI
CSR No. 3287

11:58:47
Q Okay.
So you took paternity leave in the summer/fall of 2001?
A In -- correct.
11:58:53
Q And when did you come back to work?
A I believe it was in -- jeez, it was in the fall. It was either September, October.
Q Of '01?
A Of '01, yes.
11:59:04
Q And you specifically recall systematically purging all of the accumulated emails when you returned to work in September or October '01?
A Well, I mean, you may "systemically," it makes it sound like a big ordeal. It's -- it's
11:59:21
pretty much, you know, I just have one big inbox, you know. It's sorted chronologically, and it's pretty much, you know, I just picked the date when I, you know, left for paternity and -- and deleted.
Q Deleted everything prior to that date?
11:59:37
A Correct.
Q What was the day you left for paternity leave?
A I think it was -- I think it was -- well, my daughter was -- was born on the 19th. So it was
11:59:48
probably a couple days before that when my wife was

11:59:51 going into labor. So I would say mid-July.

Q July of '01?

A July 17th of '01 maybe.

Q And so, when you come back in September or

12:00:00 October of '01, you went back and said, "Okay. I am going to dump everything in my inbox prior to July '01"?

A Yeah. I mean, again, I can't recall the exact date that I picked, but that was the general

12:00:16 idea, yes, was in -- when I was gone.

Q Okay.

And that's because you took a new position?

A Yes.

Q What was your new position again?

12:00:25 A It was program manager in charge of what was called -- and, of course, is confidential, Media Foundation.

Q Okay.

Did you get -- were you continuing to use

12:00:39 the Showtime server?

A I continue to use the Showtime server even to date. I -- I -- I use it --

Q Because you are still at DMD?

A Yes. That is correct.

12:00:55 Q Now --

12:02:03 A I do not know. I really do not recall what others use it. You know, I -- again, I -- there is a share called, you know, Showtime Public, and that's where I have my stuff. And I just know that 12:02:18 there are others who -- other directories in there, and I could not tell you whose they are.

Q So that's an address on the Showtime file server? Showtime Public?

A It's what's called a file -- I mean, it's a 12:02:28 file share. Showtime is the file server, which is potentially a collection of, you know, discontiguous machines, for instance.

And it's just a name space that people use. They enter in Whack\Wack Showtime. And then there 12:02:41 is various shares on Showtime. Showtime Public is one of the places that I put documents.

Q Sir, in the calendar year 2000, did you ever receive a notice from LCA, Law and Corporate Affairs at Microsoft, that you should preserve 12:02:59 documents?

A I do recall getting a -- an email saying that I should preserve documents. I can't remember the exact date that I received it, but yes, I do recall getting a notification.

12:03:15 Q Was that in 2000?

12:03:19 A My -- my recollection was this was not until after I had come back from paternity leave. I don't remember.

Q So late 2001?

12:03:28 A Again, I don't know if it was in 2001 or 2002. All I know is it was -- you know, I do know it was definitely not in 2000.

Q It was after 2000?

A It was again after -- I know it was after I

12:03:42 started working on the Media Foundation project.

Q Okay.

And so you can't tell me if it was late 2001 or early 2002?

A I cannot tell you when I received the --

12:03:54 the notice.

Q And from whom did you receive it?

A I can't even remember from whom I received it.

Q Was it from LCA?

12:04:04 A I -- I can't remember, you know, specifically whom it was -- was from.

Q And what did it say?

A Again, I cannot remember the exact wording of it other than, you know, the -- I certainly, in

12:04:17 my mind, know don't delete any mail or documents or

I, CHIA MEI JUI, CSR 3287, certify:

That the foregoing deposition of Bill Scheifelbein was taken before me at the time and place therein set forth, at which time the witness declared under penalty of perjury to tell the truth;

That the testimony of the witness and all objections made at the time of the deposition were recorded stenographically by me and were reduced to a computerized transcript under my direction;

That the transcript is a true record of the testimony of the witness and of all objections and colloquy made at the time of the deposition.

I further certify that I am neither counsel for nor related to any party to said action nor interested in the outcome thereof.

The certification of this transcript does not apply to any of the same by any means unless under the direct control and direction of the certifying deposition reporter.

IN WITNESS WHEREOF, I have subscribed my name this 24th day of September, 2003.

CHIA MEI JUI, CSR No. 3287

EXHIBIT 37

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MARYLAND

IN RE MICROSOFT CORP.)
ANTITRUST LITIGATION.)
)
this Document relates to:)
Burst.com, Inc. Vs.)
Microsoft Corp.,)
)
Civil Action No. JPM-02-cv-2952)

COPY

CONFIDENTIAL

VIDEOTAPED 30(b)(6) DEPOSITION UPON ORAL EXAMINATION

OF

MICROSOFT CORPORATION

(RICHARD OCHS)

9:32 A.M.

OCTOBER 3, 2003

925 FOURTH AVENUE, SUITE 2900

SEATTLE, WASHINGTON

DIANE MILLS, CCR #2399

11:17:42AM shares but I don't need these other shares?

A. Occasionally.

Q. What other possible response is there?

A. I still need it, I don't need it at all.

Q. Yeah, that's what I was saying, either I need these shares and I don't need these ones, or --

A. Or they're all still needed, or some combination thereof.

Q. Okay. And as a result of the audit, are all the shares that are identified as unnecessary then deleted?

A. On the request of the user. So a user comes to me, he says, I got your note, we don't need this anymore.

Q. But you do the deletion, you don't rely on the user to do that?

A. At that point I do the deletion, yes.

Q. Do you check with anyone else before deleting the share as a result of one of these audits? You said you've done this in the last two years.

A. I've done it, yeah, the last two years.

Q. Was there any similar process available before that? This is just formalized or is this --

A. This is more formalized as a result of the growth within the division. It was all on one server before. There was also a much smaller team. It was more like a work group, I knew most of the people. At this point, you know, when a

01:04:20PM **Q.** (BY MR. WECKER) I'm just trying to understand -- why don't you state it in your own words. What is it that divides what is backed up and what's not in a full backup of one of your servers?

01:04:34PM **A.** The full backup of the server constitutes any drive that contains user data. That -- the operating system drive contains only operating system information and can be recreated readily from CDs, from registry files that we previously discussed that are backed up onto another system, so it's copied. But that's the primary decision that went into it. This is user data that I cannot recreate from CD or from doing an installation process. This is something I can create from an installation process.

01:06:03PM **Q.** When did you -- when do you first recall becoming aware that Burst.com had sued Microsoft?

01:06:14PM **A.** When I was contacted by our legal department.

01:06:20PM **Q.** In connection with this deposition?

01:06:22PM **A.** In connection with the deposition, yes.

01:06:27PM **Q.** So you didn't read any press reports when --

01:06:31PM **A.** I had been contacted before I had seen any press reports.

01:06:35PM **Q.** Do you know that the lawsuit was instituted in June of 2002, so --

01:06:43PM **A.** That I didn't know.

01:06:44PM **Q.** Over a year ago. So during that -- was this within

01:06:50PM 1 the last month that you became aware of the lawsuit?
01:06:55PM 2 **A.** Yes, it was within the last month. There was
01:06:58PM 3 recent press articles published on it, and I learned about
01:07:04PM 4 the -- I read the press article after having been contacted
01:07:07PM 5 by our legal group.
01:07:09PM 6 **Q.** So to the extent that the company has been
01:07:14PM 7 producing documents as part of the case, you weren't aware of
01:07:18PM 8 that?
01:07:18PM 9 **A.** No, I was not aware of that.
01:07:43PM 10 **Q.** Have you within that last 15 months or so since
01:07:57PM 11 June of 2002 ever become aware of any document collection
01:08:18PM 12 being done by Microsoft to preserve records in the Digital
01:08:30PM 13 Media Division?
01:08:31PM 14 **A.** Generic records specific to this lawsuit?
01:08:35PM 15 **Q.** The servers that you manage.
01:08:37PM 16 **A.** No, nothing's come across my desk.
01:09:11PM 17 **Q.** I'm looking for somewhere in Exhibit 2 there's a
01:09:16PM 18 reference to the fact that -- I guess it's actually Page 3 of
01:09:27PM 19 17. The second to the last paragraph, I'll just read it into
01:09:34PM 20 the record. "NMPD Support Team has fully reviewed the
01:09:39PM 21 current physical environment, operating procedures and
01:09:41PM 22 security of all servers and their content, within 50/3650 to
01:09:49PM 23 ensure conformity with all pertinent OTG policies and
01:09:53PM 24 Guidelines as detailed at" that particular URL.
01:09:59PM 25 **A.** Okay, the way this is worded was based on an

REPORTER'S CERTIFICATE

I, DIANE MILLS, the undersigned Certified Court Reporter and Notary Public, do hereby certify:

That the testimony and/or proceedings, a transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to tell the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision, to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occurring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.

WITNESS MY HAND AND SEAL this 13th day of October 2003.

DIANE MILLS, CSR# 2399
Notary Public in and for the State
Of Washington, residing in King
County. Commission expires 10/10/06.

01:47:12PM

EXHIBIT 38

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,	:	
	:	
Plaintiff,	:	
	:	
v.	:	Civil Action No. 99-2496 (GK)
	:	
PHILIP MORRIS USA INC. f/k/a PHILIP MORRIS INC., et al.,	:	
	:	
Defendants.	:	

MEMORANDUM OPINION

The United States has filed a Motion for Evidentiary and Monetary Sanctions Against Philip Morris USA ("Philip Morris") and Altria Group Due to Spoliation of Evidence ("Motion"). Upon consideration of the Motion, the Opposition, the Reply, and the entire record herein, the Court concludes that the Motion should be **granted in part and denied in part.**

On October 19, 1999, this Court entered Order #1, First Case Management Order for Initial Scheduling Conference, requiring preservation of "all documents and other records containing information which could be potentially relevant to the subject matter of this litigation." Order #1, ¶ 7 at 4-5. Despite this Order, Defendants Philip Morris and Altria Group deleted electronic mail ("email") which was over sixty days old, on a monthly systemwide basis for a period of at least two years after October 19, 1999. In February, 2002, Defendants became aware that there

was inadequate compliance with Order #1, as well as its own internal document retention policies, and that some emails relevant to this lawsuit were, in all likelihood, lost or destroyed. It was not until June 19, 2002, four months after learning about this serious situation, that Philip Morris notified the Court and the Government. Moreover, despite learning of the problem in February 2002, Philip Morris continued its monthly deletions of email in February and March of 2002.

The parties have set forth in great detail the facts pertaining to Philip Morris' policies for preservation of documents and emails. Such policies were created with and approved by its parent company, Altria Group. Despite the lengthy submissions and explanations, there is no question that a significant number of emails have been lost and that Philip Morris employees were not following the company's own internal procedures for document preservation. What is particularly troubling is that Phillip Morris specifically identified at least eleven employees who failed to follow the appropriate procedures, and that those eleven employees hold some of the highest, most responsible positions in the company. These individuals include officers and supervisors who worked on scientific, marketing, corporate, and public affairs issues that are of central relevance to this lawsuit. Specifically, they include, among others, the Director of Corporate Responsibility, the Senior Principal Scientist in Research

Development and Engineering, and the Senior Vice President of Corporate Affairs. All but one of the eleven employees were noticed for deposition by the United States.

The Government points out the following undisputed facts:

> Philip Morris deleted and irretrievably lost email of employees with responsibility for: (1) tracking cigarette brand demographics such as the age and race of smokers as well as where they lived and where they purchased their cigarettes; (2) the review of yearly marketing plans; (3) planning, creating, and executing Marlboro event programs, such as the Marlboro Bar Program, the Marlboro Party at the Ranch Program, and the Marlboro Racing School; and (4) conducting consumer research on individual smokers through means such as interviews and focus groups and using Philip Morris databases which track cigarette market share figures to support Philip Morris's marketing initiatives. Philip Morris deleted and irretrievably lost email from employees serving as: (1) the highest level person at Philip Morris who is responsible for marketing Marlboro; (2) the Senior Vice President for Marketing at Philip Morris; (3) a Senior Branch Manager for Marlboro at Philip Morris USA; and (4) the Director of Marketing and Sales Decision Support.
>
> . . . [T]he employees specifically identified by Philip Morris as those who failed to preserve relevant email include officers and supervisors with responsibility for corporate policy, Master Settlement Agreement compliance, media relations and public statements and positions on issues highly relevant to the United States' claims in this action, such as the health effects of exposure to cigarette smoke. Philip Morris deleted and irretrievably lost email of employees with responsibility for: (1) communicating Philip Morris's positions to the media on tobacco-related issues, including, for example, message points for use in response to likely media inquiries regarding a Philip Morris brochure for parents on youth smoking prevention and a "message track" for responding to the American Legacy Foundation's "Truth" advertising campaign; (2) all press releases that are issued by Philip Morris USA regarding Philip Morris's business policies and positions; and (3) advertising and communication of Philip Morris's positions on tobacco

> related issues, including the Master Settlement Agreement and environmental tobacco smoke. Philip Morris deleted and irretrievably lost email from employees serving as: (1) Director of Corporate Responsibility, Planning and Programs; (2) Senior Vice President of Corporate Affairs; and (3) Vice President of Communications and Public Affairs.
>
> The employees specifically identified by Philip Morris as those who failed to preserve relevant email also include officers and supervisors with responsibility for research on potentially less harmful cigarette products, as well as new cigarette product design and development.

Motion at 45-47; see also, 19-21.

In short, it is astounding that employees at the highest corporate level in Philip Morris, with significant responsibilities pertaining to issues in this lawsuit, failed to follow Order #1, the document retention policies of their own employer, and, in particular, the "print and retain" policy which, if followed, would have ensured the preservation of those emails which have been irretrievably lost. Moreover, it must be noted that Philip Morris is a particularly sophisticated corporate litigant which has been involved in hundreds, and more likely thousands, of smoking-related lawsuits.

The only issue is what remedy is appropriate. As a practical matter, as this Court noted at the January, 2003 status hearing, "you cannot recreate what has been destroyed." Transcript, January 17, 2003 Status Hearing, at 39. Because we do not know what has been destroyed, it is impossible to accurately assess what harm has been done to the Government and what prejudice it has suffered.

See In re Prudential Insurance Co., 169 F.R.D. 598, 616 (D.N.J. 1997).

The Government requests four different forms of relief. First, it seeks an adverse inference that Philip Morris "has researched how to target its marketing at youth and actively marketed cigarettes to youth through advertising and marketing campaigns that are intended to entice young people to initiate and continue smoking, manipulated the nicotine content of its cigarettes in order to create and sustain smokers' addiction, and failed to market potentially less hazardous cigarettes after October 19, 1999." Memorandum in Support of United States' Motion, at 67.

There is no doubt that the Court has the authority to impose such a sanction for a discovery violation as serious and as irremediable as Philip Morris' email destruction. Webb v. District of Columbia, 146 F.3d 964, 971 (D.C. Cir. 1998); Shea v. Donohoe Construction Co., 775 F.2d 1071, 1074 (D.C. Cir. 1986). However, the Court has concluded, in the exercise of its discretion and with knowledge of the breadth of issues involved in this lawsuit, that such a far-reaching sanction is simply inappropriate. In Bonds v. District of Columbia, 93 F.3d 801, 808 (D.C. Cir. 1996), the Court of Appeals emphasized that "[t]he choice of sanctions should be guided by the 'concept of proportionality' between offense and sanction." See Shea, 795 F.2d at 1077. The sanction sought by the

United States fails to meet this test and simply casts too wide a net.

Second, the Government requests that Philip Morris be precluded from calling Peter Lipowicz as a fact or expert witness at trial. That request is granted. Mr. Lipowicz, as well as any other individual who has failed to comply with Philip Morris' own internal document retention program, will be precluded from testifying in any capacity at trial.

Third, the Government requests that Philip Morris and Altria Group be precluded from asserting compliance with the Master Settlement Agreement as a defense to the United States' claims. This remedy is unnecessary since the Court has already ruled in Order #537 that the Master Settlement Agreement, in and of itself, cannot constitute a defense to the United States' claims.

Fourth and finally, the Government requests that Philip Morris and Altria Group pay a monetary sanction of $2,995,000 to the Court Registry as punishment for their egregious violation of Order #1. A monetary sanction is appropriate. It is particularly appropriate here because we have no way of knowing what, if any, value those destroyed emails had to Plaintiff's case; because of that absence of knowledge, it was impossible to fashion a proportional evidentiary sanction that would accurately target the discovery violation. Despite that, it is essential that such conduct be deterred, that the corporate and legal community understand that

such conduct will not be tolerated, and that the amount of the monetary sanction fully reflect the reckless disregard and gross indifference displayed by Philip Morris and Altria Group toward their discovery and document preservation obligations. Consequently, Philip Morris and Altria Group will be jointly required to pay a monetary sanction of $2,750,000 into the Court Registry no later than September 1, 2004.[1] In addition, Phillip Morris and Altria Group will be required to reimburse the United States for the costs associated with a Fed. R. Civ. P. 30(b)(6) deposition on email destruction issues. Those costs are a minimal $5,027.48.

July 21, 2004

/s/
Gladys Kessler
United States District Judge

[1] Philip Morris identified eleven corporate managers and/or officers who failed to comply with the "print and retain" policy. Each such individual is being sanctioned in the amount of $250,000.

EXHIBIT 39

Westlaw.

Slip Copy
2004 WL 1620866 (S.D.N.Y.), 94 Fair Empl.Prac.Cas. (BNA) 1, 85 Empl. Prac. Dec. P 41,728
(Cite as: 2004 WL 1620866 (S.D.N.Y.))

H

Motions, Pleadings and Filings

United States District Court,
S.D. New York.

Laura ZUBULAKE, Plaintiff,
v.
UBS WARBURG LLC, UBS Warburg, and UBS Ag, Defendants.

No. 02 Civ. 1243(SAS).

July 20, 2004.

James A. Batson, Liddle & Robinson, LLP, New York, New York, for Plaintiff.

Kevin B. Leblang, Norman C. Simon, Kramer Levin Naftalis & Frankel LLP, New York, New York, for Defendants.

OPINION AND ORDER

SCHEINDLIN, J.

***1** Commenting on the importance of speaking clearly and listening closely, Phillip Roth memorably quipped, "The English language is a form of communication! ... Words aren't only bombs and bullets--no, they're little gifts, containing meanings!" [FN1] What is true in love is equally true at law: Lawyers and their clients need to communicate clearly and effectively with one another to ensure that litigation proceeds efficiently. When communication between counsel and client breaks down, conversation becomes "just crossfire," [FN2] and there are usually casualties.

FN1. PHILIP ROTH, PORTNOY'S COMPLAINT (1967).

FN2. *Id.*

I. INTRODUCTION

This is the fifth written opinion in this case, a relatively routine employment discrimination dispute in which discovery has now lasted over two years. Laura Zubulake is once again moving to sanction UBS for its failure to produce relevant information and for its tardy production of such material. In order to decide whether sanctions are warranted, the following question must be answered: Did UBS fail to preserve and timely produce relevant information and, if so, did it act negligently, recklessly, or willfully?

This decision addresses counsel's obligation to ensure that relevant information is preserved by giving clear instructions to the client to preserve such information and, perhaps more importantly, a client's obligation to heed those instructions. Early on in this litigation, UBS's counsel--both in-house and outside--instructed UBS personnel to retain relevant electronic information. Notwithstanding these instructions, certain UBS employees deleted relevant e-mails. Other employees never produced relevant information to counsel. As a result, many discoverable e-mails were not produced to Zubulake until recently, even though they were responsive to a document request propounded on June 3, 2002. [FN3] In addition, a number of e-mails responsive to that document request were deleted and have been lost altogether.

FN3. *See Zubulake v. UBS Warburg LLC*, 217 F.R.D. 309, 312 (S.D.N . Y.2003) (*"Zubulake I"*) (quoting Zubulake's document request, which called for "[a]ll documents concerning any communications by or between UBS employees concerning Plaintiff," and defining "document" to include "without limitation, electronic or computerized data compilations.").

Counsel, in turn, failed to request retained information from one key employee and to give the litigation hold instructions to another. They also failed to adequately communicate with another employee about how she maintained her computer files. Counsel also failed to safeguard backup tapes that might have contained some of the deleted e-mails, and which would have mitigated the damage done by UBS's destruction of those e-mails.

The conduct of both counsel and client thus calls to mind the now-famous words of the prison captain in *Cool Hand Luke:* "What we've got here is a failure to communicate."

[FN4] Because of this failure by *both* UBS and its counsel, Zubulake has been prejudiced. As a result, sanctions are warranted.

FN4. Captain, Road Prison 36, in COOL HAND LUKE (1967), found at http://ask.yahoo.com/ask/20011026.html.

II. FACTS

The allegations at the heart of this lawsuit and the history of the parties' discovery disputes have been well-documented in the Court's prior decisions, [FN5] familiarity with which is presumed. In short, Zubulake is an equities trader specializing in Asian securities who is suing her former employer for gender discrimination, failure to promote, and retaliation under federal, state, and city law.

FN5. *See* *Zubulake I*, 217 F.R.D. 309 (addressing the legal standard for determining the cost allocation for producing e-mails contained on backup tapes); *Zubulake v. UBS Warburg LLC*, No. 02 Civ. 1243, 2003 WL 21087136 (S.D.N.Y. May 13, 2003) (*"Zubulake II"*) (addressing Zubulake's reporting obligations); *Zubulake v. UBS Warburg LLC*, 216 F.R.D. 280 (S.D.N.Y.2003) (*"Zubulake III"*) (allocating backup tape restoration costs between Zubulake and UBS); *Zubulake v. UBS Warburg LLC*, 220 F.R.D. 212 (S.D.N.Y.2003) (*"Zubulake IV"*) (ordering sanctions against UBS for violating its duty to preserve evidence).

A. Background

***2** Zubulake filed an initial charge of gender discrimination with the EEOC on August 16, 2001. [FN6] Well before that, however--as early as April 2001--UBS employees were on notice of Zubulake's impending court action. [FN7] After she received a right-to-sue letter from the EEOC, Zubulake filed this lawsuit on February 15, 2002. [FN8]

FN6. *See* *Zubulake I*, 217 F.R.D. at 312.

FN7. *See* *Zubulake IV*, 220 F.R.D. at 217 ("Thus, the relevant people at UBS anticipated litigation in April 2001. The duty to preserve attached at the time that litigation was reasonably anticipated.").

FN8. *See* *Zubulake I*, 217 F.R.D. at 312.

Fully aware of their common law duty to preserve relevant evidence, UBS's in-house attorneys gave oral instructions in August 2001--immediately after Zubulake filed her EEOC charge--instructing employees not to destroy or delete material potentially relevant to Zubulake's claims, and in fact to segregate such material into separate files for the lawyers' eventual review. [FN9] This warning pertained to both electronic and hard-copy files, but did *not* specifically pertain to so-called "backup tapes," maintained by UBS's information technology personnel. [FN10] In particular, UBS's in-house counsel, Robert L. Salzberg, "advised relevant UBS employees to preserve and turn over to counsel all files, records or other written memoranda or documents concerning the allegations raised in the [EEOC] charge or any aspect of [Zubulake's] employment." [FN11] Subsequently--but still in August 2001-- UBS's outside counsel met with a number of the key players in the litigation and reiterated Mr. Salzberg's instructions, reminding them to preserve relevant documents, "including e-mails." [FN12] Salzberg reduced these instructions to writing in e-mails dated February 22, 2002 [FN13]--immediately after Zubulake filed her complaint--and September 25, 2002. [FN14] Finally, in August 2002, after Zubulake propounded a document request that specifically called for e-mails stored on backup tapes, UBS's outside counsel instructed UBS information technology personnel to stop recycling backup tapes. [FN15] *Every* UBS employee mentioned in this Opinion (with the exception of Mike Davies) either personally spoke to UBS's outside counsel about the duty to preserve e-mails, or was a recipient of one of Salzberg's e-mails. [FN16]

FN9. *See* *Zubulake IV*, 220 F.R.D. at 215.

FN10. *See id.*

FN11. *See* 10/14/03 Letter from Norman Simon, counsel to UBS, to the Court ("10/14/03 Simon Ltr.") at 1.

FN12. *Id.* at 1 n. 1.

FN13. *See* Ex. A to 10/14/03 Simon Ltr.

FN14. *See* Ex. C to 10/14/03 Simon Ltr.

FN15. *See Zubulake IV*, 220 F.R.D. at 215. *See also* 10/14/03 Simon Ltr. at 2 ("In late August 2002, plaintiff first requested backup e-mails from certain UBS employees. Thereafter, I advised UBS's information technology personnel to locate and retain all existing backup tapes for employees identified by plaintiff. I re-emphasized that directive and confirmed that these tapes continued to be preserved both orally and in writing on several subsequent occasions.").

FN16. Specifically, UBS's outside counsel spoke with Matthew Chapin on August 29, 2001, with Joy Kim and Andrew Clarke on August 30, 2001, and with Jeremy Hardisty, John Holland, and Dominic Vail on August 31, 2001. *See* 10/14/03 Simon Ltr. at 1 n. 1. Holland, Chapin, Hardisty, Brad Orgill, James Tregear, Rose Tong, Vail, Barbara Amone, Joshua Varsano, and Rebecca White were all direct recipients of Salzberg's e-mails. *See* Ex. A to 10/14/03 Simon Ltr.

B. Procedural History

In *Zubulake I,* I addressed Zubulake's claim that relevant e-mails had been deleted from UBS's active servers and existed only on "inaccessible" archival media (*i.e.,* backup tapes). [FN17] Arguing that e-mail correspondence that she needed to prove her case existed only on those backup tapes, Zubulake called for their production. UBS moved for a protective order shielding it from discovery altogether or, in the alternative, shifting the cost of backup tape restoration onto Zubulake. Because the evidentiary record was sparse, I ordered UBS to bear the costs of restoring a sample of the backup tapes. [FN18]

FN17. *See generally Zubulake I*, 217 F.R.D. 309.

FN18. *See id.* at 324.

After the sample tapes were restored, UBS continued to press for cost shifting with respect to any further restoration of backup tapes. In *Zubulake III,* I ordered UBS to bear the lion's share of restoring certain backup tapes because Zubulake was able to demonstrate that those tapes were likely to contain relevant information. [FN19] Specifically, Zubulake had demonstrated that UBS had failed to maintain all relevant information (principally e-mails) in its active files. After *Zubulake III,* Zubulake chose to restore sixteen backup tapes. [FN20] "In the restoration effort, the parties discovered that certain backup tapes [were] missing." [FN21] They also discovered a number of e-mails on the backup tapes that were missing from UBS's active files, confirming Zubulake's suspicion that relevant e-mails were being deleted or otherwise lost. [FN22]

FN19. *See Zubulake III*, 216 F.R.D. at 289.

FN20. 4/22/04 Oral Argument Transcript ("Tr.") at 29-30.

FN21. *Zubulake IV*, 220 F.R.D. at 215.

FN22. *See id.; see also Zubulake III*, 216 F.R.D. at 287.

***3** *Zubulake III* begat *Zubulake IV,* where Zubulake moved for sanctions as a result of UBS's failure to preserve all relevant backup tapes, and UBS's deletion of relevant e-mails. Finding fault in UBS's document preservation strategy but lacking evidence that the lost tapes and deleted e-mails were particularly favorable to Zubulake, I ordered UBS to pay for the re-deposition of several key UBS employees--Varsano, Chapin, Hardisty, Kim, and Tong--so that Zubulake could inquire about the newly-restored e-mails. [FN23]

FN23. *See Zubulake IV*, 220 F.R.D. at 222 (finding that spoliation was not willful and declining to grant an adverse inference instruction).

C. The Instant Dispute

The essence of the current dispute is that during the re-depositions required by *Zubulake IV,* Zubulake learned about more deleted e-mails and about the existence of e-mails preserved on UBS's active servers that were, to that point, never produced. In sum, Zubulake has now presented

evidence that UBS personnel deleted relevant e-mails, some of which were subsequently recovered from backup tapes (or elsewhere) and thus produced to Zubulake long after her initial document requests, and some of which were lost altogether. Zubulake has also presented evidence that some UBS personnel did not produce responsive documents to counsel until recently, depriving Zubulake of the documents for almost two years.

1. Deleted E-Mails

Notwithstanding the clear and repeated warnings of counsel, Zubulake has proffered evidence that a number of key UBS employees--Orgill, Hardisty, Holland, Chapin, Varsano, and Amone--failed to retain e-mails germane to Zubulake's claims. Some of the deleted e-mails were restored from backup tapes (or other sources) and have been produced to Zubulake, others have been altogether lost, though there is strong evidence that they once existed. Although I have long been aware that certain e-mails were deleted, [FN24] the re-depositions demonstrate the scope and importance of those documents.

FN24. *See* *Zubulake III*, 216 F.R.D. at 287.

a. At Least One E-Mail Has Never Been Produced

At least one e-mail has been irretrievably lost; the existence of that e-mail is known only because of oblique references to it in other correspondence. It has already been shown that Chapin--the alleged primary discriminator--deleted relevant e-mails. [FN25] In addition to those e-mails, Zubulake has evidence suggesting that Chapin deleted at least one other e-mail that has been lost *entirely*. An e-mail from Chapin sent at 10:47 AM on September 21, 2001, asks Kim to send him a "document" recounting a conversation between Zubulake and a co-worker. [FN26] Approximately 45 minutes later, Chapin sent an e-mail complaining about Zubulake to his boss and to the human resources employees handling Zubulake's case purporting to contain a verbatim recitation of a conversation between Zubulake and her co-worker, as overheard by Kim. [FN27] This conversation allegedly took place on September 18, 2001, at 10:58 AM . [FN28] There is reason to believe that immediately after that conversation, Kim sent Chapin an e-mail that contained the verbatim quotation that appears in Chapin's September 21 e-mail--the "document" that Chapin sought from Kim just prior to sending that e-mail--and that Chapin deleted it. [FN29] That e-mail, however, has never been recovered and is apparently lost.

FN25. *See id.* (finding that Chapin "was concealing and deleting especially relevant e-mails").

FN26. *See* 9/21/01 e-mail from Chapin to Kim, UBSZ 001400.

FN27. 7/21/01 e-mail from Chapin to Holland, Varsano and Tong, UBSZ 001399.

FN28. *See id.*

FN29. Kim sent an e-mail at 11:19 AM on September 18, bearing the subject "2," which appears to contain a *different* verbatim quotation from Zubulake. *See* UBSZ 004047. The e-mail containing the quotation that Chapin used in his September 21 e-mail would have borne the subject "1" and been sent sometime between 10:58 AM and 11:19 AM. *See also* 2/6/04 Deposition of Matthew Chapin at 565 (Chapin testifying that he might have pasted the quotation from another document); *id.* at 587 (Chapin testifying that he wasn't sure whether the quotation was a paraphrase or pasted from another e-mail).

***4** Although Zubulake has only been able to present concrete evidence that this one e-mail was irretrievably lost, there may well be others. Zubulake has presented extensive proof, detailed below, that UBS personnel were deleting relevant e-mails. Many of those e-mails were recovered from backup tapes. The UBS record retention policies called for monthly backup tapes to be retained for three years. [FN30] The tapes covering the relevant time period (circa August 2001) should have been available to UBS in August 2002, when counsel instructed UBS's information technology personnel that backup tapes were also subject to the litigation hold.

FN30. *See* *Zubulake I*, 217 F.R.D. at 314 ("Nightly backup tapes were kept for twenty working days,

weekly tapes for one year, and monthly tapes for three years. After the relevant time period elapsed, the tapes were recycled.").

Nonetheless, many backup tapes for the most relevant time periods are missing, including: Tong's tapes for June, July, August, and September of 2001; Hardisty's tapes for May, June, and August of 2001; Clarke and Vinay Datta's tapes for April and September 2001; and Chapin's tape for April 2001. [FN31] Zubulake did not even learn that four of these tapes were missing until after *Zubulake IV*. Thus, it is impossible to know just how many relevant e-mails have been lost in their entirety. [FN32]

FN31. *See* Current List of Missing Monthly Backup Tapes, Ex. E to 5/21/04 Reply Affirmation of James A. Batson, counsel to Zubulake ("Batson Reply Aff."). UBS does have some weekly backup tapes for portions of these times for everyone but Tong. *See id.* n. 1.

FN32. In *Zubulake IV,* I held that UBS's destruction of relevant backup tapes was negligent, rather than willful, because whether the duty to preserve extended to backup tapes was "a grey area." 220 F .R.D. at 221. I further held that "[l]itigants are now on notice, at least in this Court, that backup tapes that can be identified as storing information created by or for 'key players' must be preserved." *Id.* at 221 n. 47.
Because UBS lost the backup tapes mentioned in this opinion well before *Zubulake IV* was issued, it was not on notice of the precise contours of its duty to preserve backup tapes. Accordingly, I do not discuss UBS's destruction of relevant backup tapes as proof that UBS acted willfully, but rather to show that Zubulake can no longer prove what was deleted and when, and to demonstrate that the scope of e-mails that have been irrevocably lost is broader than initially thought.

b. Many E-Mails Were Deleted and Only Later Recovered from Alternate Sources

Other e-mails were deleted in contravention of counsel's "litigation hold" instructions, but were subsequently recovered from alternative sources--such as backup tapes--and thus produced to Zubulake, albeit almost two years after she propounded her initial document requests. For example, an e-mail from Hardisty to Holland (and on which Chapin was copied) reported that Zubulake said "that all she want[ed] is to be treated like the other 'guys' on the desk." [FN33] That e-mail was recovered from Hardisty's August 2001 backup tape-- and thus it was on his active server as late as August 31, 2001, when the backup was generated--but was not in his active files. That e-mail therefore *must have* been deleted subsequent to counsel's warnings. [FN34]

FN33. 7/23/01 e-mail from Hardisty to Holland, UBSZ 002957.

FN34. Because the e-mail was dated July 23, 2001, the same cannot be said of Chapin or Holland. Although they had a duty to preserve relevant e-mails starting in April 2001, counsel did not specifically warn them until August 2001. Chapin and Holland might have deleted the e-mail prior to counsel's warning.

Another e-mail, from Varsano to Hardisty dated August 31, 2001--the very day that Hardisty met with outside counsel--forwarded an earlier message from Hardisty dated June 29, 2001, that recounted a conversation in which Hardisty "warned" Chapin about his management of Zubulake, and in which Hardisty reminded Chapin that Zubulake could "be a good broker." [FN35] This e-mail was absent from UBS's initial production and had to be restored from backup; apparently neither Varsano nor Hardisty had retained it. [FN36] This deletion is especially surprising because Varsano retained the June 29, 2001 e-mail for over two months before he forwarded it to Hardisty. [FN37] Indeed, Varsano testified in his deposition that he "definitely" "saved all of the e-mails that [he] received concerning Ms. Zubulake" in 2001, that they were saved in a separate "very specific folder," and that "all of those e-mails" were produced to counsel. [FN38]

FN35. 8/31/01 e-mail from Varsano to Hardisty, UBSZ 002968. Because the header information

from Hardisty's June 29, 2001 e-mail was cropped when Varsano forwarded it, it is not clear who--besides, presumably, Varsano--received that message.

FN36. *See* Example of Relevant E-Mails, in Chronological Order, That Were Restored From April to October 2001 Backup Tapes, Ex. I to the 4/30/04 Affirmation of James A. Batson ("Batson Aff."). This chart does not clearly indicate from which backup tape the e-mail was restored.

FN37. *See id.; see also* 6/29/01 e-mail from Hardisty to Holland, Amone and Varsano, UBSZ 004097 (the underlying e-mail, also restored from a backup tape).

FN38. 1/26/04 Deposition of Joshua Varsano ("Varsano Dep.") at 289- 90. If Varsano's testimony is credited, then counsel somehow failed to produce those e-mails to Zubulake.

As a final example, an e-mail from Hardisty to Varsano and Orgill, dated September 1, 2001, specifically discussed Zubulake's termination. It read: "LZ--ok once lawyers have been signed off, probably one month, but most easily done in combination with the full Asiapc [downsizing] announcement. We will need to document her performance post her warning HK. Matt [Chapin] is doing that." [FN39] Thus, Orgill and Hardisty had decided to terminate Zubulake as early as September 1, 2001. Indeed, two days later Orgill replied, "It's a pity we can't act on LZ earlier." [FN40] Neither the authors nor any of the recipients of these e-mails retained any of them, even though these e-mails were sent within days of Hardisty's meeting with outside counsel. They were not even preserved on backup tapes, but were only recovered because Kim happened to have retained copies. [FN41] Rather, all three people (Hardisty, Orgill and Varsano) deleted these e-mails from their computers by the end of September 2001. Apart from their direct relevance to Zubulake's claims, these e-mails may also serve to rebut Orgill and Hardisty's deposition testimony. Orgill testified that he played no role in the decision to terminate Zubulake. [FN42] And Hardisty testified that he did not recall discussing Zubulake's termination with Orgill. [FN43]

FN39. 9/3/01 e-mail from Orgill to Hardisty and Varsano (replying to and attaching 9/1/01 e-mail from Hardisty to Varsano and Orgill), UBSZ 002965.

FN40. *Id.*

FN41. These e-mails were some of the ones fortuitously recovered from Kim's active files, as discussed below. *See* Memorandum of Law in Support of Plaintiff's Motion for Sanctions ("Pl.Mem.") at 6 n. 18. And, indeed, Kim did not have all of the original e-mails, but retained only the last e-mail in the chain of correspondence, which had the earlier e-mails in the same chain embedded in it. It is not clear why or how she obtained this e-mail.

FN42. *See* 3/4/03 Deposition of Brad Orgill at 43.

FN43. *See* 2/26/03 Deposition of Jeremy Hardisty at 262.

***5** These are merely examples. The proof is clear: UBS personnel unquestionably deleted relevant e-mails from their computers after August 2001, even though they had received at least two directions from counsel not to. Some of those e-mails were recovered (Zubulake has pointed to at least 45), [FN44] but some--and no one can say how many--were not. And even those e-mails that were recovered were produced to Zubulake well after she originally asked for them.

FN44. *See* The Actual Number of E-Mails not Retained by UBS Executives Post-Dating the August EEOC Filing, Ex. H to Batson Reply Aff.

2. Retained, But Unproduced, E-Mails

Separate and apart from the deleted material are a number of e-mails that were absent from UBS's initial production even though they were not deleted. These e-mails existed in the active, on-line files of two UBS employees--Kim and Tong--but were not produced to counsel and thus not turned

over to Zubulake until she learned of their existence as a result of her counsel's questions at deposition. Indeed, these e-mails were not produced until after Zubulake had conducted thirteen depositions and four re-depositions. [FN45]

FN45. *See* Batson Reply Aff. ¶ 6.

During her February 19, 2004, deposition, Kim testified that she was *never* asked to produce her files regarding Zubulake to counsel, nor did she ever actually produce them, [FN46] although she was asked to retain them. [FN47] One week after Kim's deposition, UBS produced seven new e-mails. The obvious inference to be drawn is that, subsequent to the deposition, counsel for the first time asked Kim to produce her files. Included among the new e-mails produced from Kim's computer was one (dated September 18, 2001) that recounts a conversation between Zubulake and Kim in which Zubulake complains about the way women are treated at UBS. [FN48] Another e-mail recovered from Kim's computer contained the correspondence, described above, in which Hardisty and Orgill discuss Zubulake's termination, and in which Orgill laments that she could not be fired sooner than she was.

FN46. *See* 2/19/04 Deposition of Joy Kim at 44-45.

FN47. *See id.* at 35.

FN48. *See* UBSZ 004047.

On March 29, 2004, UBS produced several new e-mails, and three new e-mail retention policies, from Tong's active files. [FN49] At her deposition two weeks earlier, Tong explained (as she had at her first deposition, a year previous) that she kept a separate "archive" file on her computer with documents pertaining to Zubulake. [FN50] UBS admits that until the March 2004 deposition, it misunderstood Tong's use of the word "archive" to mean backup tapes; after her March 2004 testimony, it was clear that she meant active data. Again, the inference is that UBS's counsel then, for the first time, asked her to produce her active computer files.

FN49. *See* Ex. M to the Batson Aff.

FN50. *See* 3/10/04 Deposition of Rose Tong at 97, 140; *see also* 3/4/03 Deposition of Rose Tong at 66-67.

Among the new e-mails recovered from Tong's computer was one, dated August 21, 2001, at 11:06 AM, from Mike Davies [FN51] to Tong that read, "received [.] thanks[,] mike," [FN52] and which was in response to an e-mail from Tong, sent eleven minutes earlier, that read, "Mike, I have just faxed over to you the 7 pages of Laura's [EEOC] charge against the bank." [FN53] While Davies' three-word e-mail seems insignificant in isolation, it is actually quite important.

FN51. Davies, Tong's supervisor, was--as far as the record before the Court shows--not specifically instructed about the litigation hold by UBS's counsel.

FN52. 8/21/01 e-mail from Davies to Tong, UBSZ 004352.

FN53. 8/21/01 e-mail from Tong to Davies, UBSZ 004351.

***6** Three hours after sending that three word response, Davies sent an e-mail to Tong with the subject line "Laura Zubulake" that reads:

> I spoke to Brad [Orgill]--he's looking to exit her asap [by the end of month], and looking for guidance from us following letter? we sent her re her performance [or does he mean PMM]
> I said you were on call with U.S. yesterday and that we need U.S. legal advise etc, but be aware he's looking to finalise quickly!--said if off by end August then no bonus consideration, but if still employed after aug consideration should be given? [FN54]

FN54. 8/21/01 e-mail from Davies to Tong, UBSZ 004353. The text of this e-mail was part of UBS's initial production.

Davies testified that he was unaware of Zubulake's EEOC charge when he spoke with Orgill. [FN55] The timing of his e-mails, however--the newly produced e-mail that acknowledges receiving Zubulake's EEOC charge coming three hours before the e-mail beginning "I spoke to

Brad"--strongly undercuts this claim. The new e-mail, therefore, is circumstantial evidence that could support the inference that Davies knew about the EEOC charge when he spoke with Orgill, and suggests that Orgill knew about the EEOC charge when the decision was made to terminate Zubulake. [FN56] Its relevance to Zubulake's retaliation claim is unquestionable, and yet it was not produced until April 20, 2004. [FN57]

FN55. *See* 3/11/03 Deposition of Mike Davies at 21 ("The EEOC application was something new to me, so it did stand out in my mind, and I hadn't had a conversation with anyone about it, so I hadn't spoken to Brad about it"); *see also id.* (Davies replying "no" in response to the question "Did you ever speak to Brad about it?").

FN56. It is also plausible that Orgill and Davies spoke days earlier--before either knew about the EEOC charge--and Davies might have omitted that information from his initial e-mail to Tong. The newly discovered e-mail, however, is helpful to Zubulake in arguing her view of the evidence.

FN57. Ostensible copies of these e-mails were produced on March 29, 2004--from where is not clear--but they appear to have the incorrect time/date stamps. The copies produced on April 20, because they came directly from Tong's computer, are more reliable.

* * *

Zubulake now moves for sanctions as a result of UBS's purported discovery failings. In particular, she asks--as she did in *Zubulake IV*--that an adverse inference instruction be given to the jury that eventually hears this case.

III. LEGAL STANDARD

Spoliation is "the destruction or significant alteration of evidence, or the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation." [FN58] "The determination of an appropriate sanction for spoliation, if any, is confined to the sound discretion of the trial judge, and is assessed on a case-by-case basis." [FN59] The authority to sanction litigants for spoliation arises jointly under the Federal Rules of Civil Procedure and the court's inherent powers. [FN60]

FN58. *West v. Goodyear Tire & Rubber Co.*, 167 F.3d 776, 779 (2d Cir.1999).

FN59. *Fujitsu Ltd. v. Federal Express Corp.*, 247 F.3d 423, 436 (2d Cir.2001).

FN60. *See Turner v. Hudson Transit Lines, Inc.*, 142 F.R.D. 68, 72 (S.D.N.Y.1991) (Francis, M.J.) (citing Fed.R.Civ.P. 37); *see also Shepherd v. American Broadcasting Cos.*, 62 F.3d 1469, 1474 (D.C.Cir.1995) ("When rules alone do not provide courts with sufficient authority to protect their integrity and prevent abuses of the judicial process, the inherent power fills the gap."); *id.* at 1475 (holding that sanctions under the court's inherent power can "include ... drawing adverse evidentiary inferences").

The spoliation of evidence germane "to proof of an issue at trial can support an inference that the evidence would have been unfavorable to the party responsible for its destruction." [FN61] A party seeking an adverse inference instruction (or other sanctions) based on the spoliation of evidence must establish the following three elements: (1) that the party having control over the evidence had an obligation to preserve it at the time it was destroyed; (2) that the records were destroyed with a "culpable state of mind" and (3) that the destroyed evidence was "relevant" to the party's claim or defense such that a reasonable trier of fact could find that it would support that claim or defense. [FN62]

FN61. *Kronisch v. United States*, 150 F.3d 112, 126 (2d Cir.1998).

FN62. *Byrnie v. Town of Cromwell*, 243 F.3d 93, 107-12 (2d Cir.2001). An adverse inference instruction may also be warranted, in some circumstances, for the untimely production of evidence. *See Residential Funding Corp. v. DeGeorge Fin. Corp.*, 306 F.3d 99, 107 (2d

Cir.2002).

In this circuit, a "culpable state of mind" for purposes of a spoliation inference includes ordinary negligence. [FN63] When evidence is destroyed in bad faith (*i.e.,* intentionally or willfully), that fact alone is sufficient to demonstrate relevance. [FN64] By contrast, when the destruction is negligent, relevance must be proven by the party seeking the sanctions. [FN65]

FN63. *See* *Residential Funding*, 306 F.3d at 108.

FN64. *See id.* at 109.

FN65. *See id.*

*7 In the context of a request for an adverse inference instruction, the concept of "relevance" encompasses not only the ordinary meaning of the term, [FN66] but also that the destroyed evidence would have been favorable to the movant. [FN67] "This corroboration requirement is even more necessary where the destruction was merely negligent, since in those cases it cannot be inferred from the conduct of the spoliator that the evidence would even have been harmful to him." [FN68] This is equally true in cases of gross negligence or recklessness; only in the case of *willful* spoliation does the degree of culpability give rise to a presumption of the relevance of the documents destroyed. [FN69]

FN66. *See* Fed.R.Evid. 401; Fed.R.Civ.P. 26(b)(1).

FN67. *See* *Residential Funding*, 306 F.3d at 108-09 ("Although we have stated that, to obtain an adverse inference instruction, a party must establish that the unavailable evidence is 'relevant' to its claims or defenses, our cases make clear that 'relevant' in this context means something more than sufficiently probative to satisfy Rule 401 of the Federal Rules of Evidence. Rather, the party seeking an adverse inference must adduce sufficient evidence from which a reasonable trier of fact could infer that the destroyed or unavailable evidence would have been of the nature alleged by the party affected by its destruction.") (quotation marks, citations, footnote, and alterations omitted).

FN68. *Turner*, 142 F.R.D. at 77 (citing *Stanojev v. Ebasco Services, Inc.*, 643 F.2d 914, 924 n. 7 (2d Cir.1981)).

FN69. *See* *Residential Funding*, 306 F.3d at 109.

IV. DISCUSSION

In *Zubulake IV,* I held that UBS had a duty to preserve its employees' active files as early as April 2001, and certainly by August 2001, when Zubulake filed her EEOC charge. [FN70] Zubulake has thus satisfied the first element of the adverse inference test. As noted, the central question implicated by this motion is whether UBS and its counsel took all necessary steps to guarantee that relevant data was both preserved and produced. If the answer is "no," then the next question is whether UBS acted wilfully when it deleted or failed to timely produce relevant information--resulting in either a complete loss or the production of responsive information close to two years after it was initially sought. If UBS acted wilfully, this satisfies the mental culpability prong of the adverse inference test and also demonstrates that the deleted material was relevant. [FN71] If UBS acted negligently or even recklessly, then Zubulake must show that the missing or late-produced information was relevant.

FN70. *See* *Zubulake IV*, 220 F.R.D. at 216-17.

FN71. *See* *Residential Funding*, 306 F.3d at 109 ("[O]nly in the case of *willful* spoliation is the spoliator's mental culpability itself evidence of the relevance of the documents destroyed.")

A. Counsel's Duty to Monitor Compliance

In *Zubulake IV,* I summarized a litigant's preservation obligations:

> Once a party reasonably anticipates litigation, it must suspend its routine document retention/destruction policy and put in place a "litigation hold" to ensure the preservation of relevant documents. As a general rule, that litigation hold does not apply to inaccessible backup tapes (*e.g.,* those typically maintained solely for the purpose of disaster recovery), which may continue to be recycled on the schedule set forth in the company's policy. On the other hand, if backup tapes are accessible (*i.e.,* actively

used for information retrieval), then such tapes *would* likely be subject to the litigation hold. [FN72]

> FN72. *Zubulake IV*, 220 F.R.D. at 218 (emphasis in original); *see also id.* ("[I]t does make sense to create one exception to this general rule. If a company can identify where particular employee documents are stored on backup tapes, then the tapes storing the documents of "key players" to the existing or threatened litigation should be preserved if the information contained on those tapes is not otherwise available. This exception applies to *all* backup tapes.") (emphasis in original).

A party's discovery obligations do not end with the implementation of a "litigation hold"--to the contrary, that's only the beginning. Counsel must oversee compliance with the litigation hold, monitoring the party's efforts to retain and produce the relevant documents. Proper communication between a party and her lawyer will ensure (1) that all relevant information (or at least all sources of relevant information) is discovered, (2) that relevant information is retained on a continuing basis; and (3) that relevant non-privileged material is produced to the opposing party.

1. Counsel's Duty to Locate Relevant Information

***8** Once a "litigation hold" is in place, a party and her counsel must make certain that all sources of potentially relevant information are identified and placed "on hold," to the extent required in *Zubulake IV*. To do this, counsel must become fully familiar with her client's document retention policies, as well as the client's data retention architecture. [FN73] This will invariably involve speaking with information technology personnel, who can explain system-wide backup procedures and the actual (as opposed to theoretical) implementation of the firm's recycling policy. It will also involve communicating with the "key players" in the litigation, [FN74] in order to understand how they stored information. In this case, for example, some UBS employees created separate computer files pertaining to Zubulake, while others printed out relevant e-mails and retained them in hard copy only. Unless counsel interviews each employee, it is impossible to determine whether all potential sources of information have been inspected. A brief conversation with counsel, for example, might have revealed that Tong maintained "archive" copies of e-mails concerning Zubulake, and that "archive" meant a separate on-line computer file, not a backup tape. Had that conversation taken place, Zubulake might have had relevant e-mails from that file two years ago.

> FN73. *Cf. Zubulake I*, 217 F.R.D. at 324 ("[i]t is necessary to thoroughly understand the responding party's computer system, both with respect to active and stored data").

> FN74. *Zubulake IV*, 220 F.R.D. at 218.

To the extent that it may not be feasible for counsel to speak with every key player, given the size of a company or the scope of the lawsuit, counsel must be more creative. It may be possible to run a system-wide keyword search; counsel could then preserve a copy of each "hit." Although this sounds burdensome, it need not be. Counsel does not have to review these documents, only see that they are retained. For example, counsel could create a broad list of search terms, run a search for a limited time frame, and then segregate responsive documents. [FN75] When the opposing party propounds its document requests, the parties could negotiate a list of search terms to be used in identifying responsive documents, and counsel would only be obliged to review documents that came up as "hits" on the second, more restrictive search. The initial broad cut merely guarantees that relevant documents are not lost.

> FN75. It might be advisable to solicit a list of search terms from the opposing party for this purpose, so that it could not later complain about which terms were used.

In short, it is *not* sufficient to notify all employees of a litigation hold and expect that the party will then retain and produce all relevant information. Counsel must take affirmative steps to monitor compliance so that all sources of discoverable information are identified and searched. This is not to say that counsel will necessarily succeed in locating all such sources, or that the later discovery of new sources is evidence of a lack of effort. But counsel and

client must take *some reasonable steps* to see that sources of relevant information are located.

2. Counsel's Continuing Duty to Ensure Preservation

Once a party and her counsel have identified all of the sources of potentially relevant information, they are under a duty to retain that information (as per *Zubulake IV*) and to produce information responsive to the opposing party's requests. Rule 26 creates a "duty to supplement" those responses. [FN76] Although the Rule 26 duty to supplement is nominally the party's, it really falls on counsel. As the Advisory Committee explains,

> FN76. Fed.R.Civ.P. 26(e).
>
> ***9** Although the party signs the answers, it is his lawyer who understands their significance and bears the responsibility to bring answers up to date. In a complex case all sorts of information reaches the party, who little understands its bearing on answers previously given to interrogatories. In practice, therefore, the lawyer under a continuing burden must periodically recheck all interrogatories and canvass all new information. [FN77]
>
> FN77. 1966 Advisory Committee Note to Fed.R.Civ.P. 26(e).

To ameliorate this burden, the Rules impose a continuing duty to supplement responses to discovery requests *only* when "a party[,] or more frequently his lawyer, obtains actual knowledge that a prior response is incorrect. This exception does not impose a duty to check the accuracy of prior responses, but it prevents knowing concealment by a party or attorney." [FN78]

> FN78. *Id.* The Rules also create a duty to supplement in two other instances: (a) when the Court so orders, and (b) with respect to Rule 26(a) initial disclosures, "because of the obvious importance to each side of knowing all witnesses and because information about witnesses routinely comes to each lawyer's attention," *id. See* Fed.R.Civ.P. 26(e).

The *continuing* duty to supplement disclosures strongly suggests that parties also have a duty to make sure that discoverable information is not lost. Indeed, the notion of a "duty to preserve" connotes an ongoing obligation. Obviously, if information is lost or destroyed, it has not been preserved. [FN79]

> FN79. *See* OXFORD ENGLISH DICTIONARY (2d ed.1989) (defining "preserve" as "[t]o keep safe from harm or injury; to keep in safety, save, take care of, guard"); *see also id.* (defining "retain" as "[t]o keep hold or possession of; to continue having or keeping, in various senses").

The tricky question is what that continuing duty entails. What must a lawyer do to make certain that relevant information--especially electronic information--is being retained? Is it sufficient if she periodically re-sends her initial "litigation hold" instructions? What if she communicates with the party's information technology personnel? Must she make occasional on-site inspections?

Above all, the requirement must be reasonable. A lawyer cannot be obliged to monitor her client like a parent watching a child. At some point, the client must bear responsibility for a failure to preserve. At the same time, counsel is more conscious of the contours of the preservation obligation; a party cannot reasonably be trusted to receive the "litigation hold" instruction once and to fully comply with it without the active supervision of counsel. [FN80]

> FN80. *See Telecom International Am. Ltd. v. AT & T Corp.*, 189 F.R.D. 76, 81 (S.D.N.Y.1999) ("Once on notice [that evidence is relevant], the obligation to preserve evidence runs first to counsel, who then has a duty to advise and explain to the client its obligations to retain pertinent documents that may be relevant to the litigation.") (citing *Kansas-Nebraska Natural Gas Co. v. Marathon Oil Co.*, 109 F.R.D. 12, 18 (D.Neb.1983)).

There are thus a number of steps that counsel should take to ensure compliance with the preservation obligation. While these precautions may not be enough (or may be too much) in some cases, they are designed to promote the continued

preservation of potentially relevant information in the typical case.

First, counsel must issue a "litigation hold" at the outset of litigation or whenever litigation is reasonably anticipated. [FN81] The litigation hold should be periodically re-issued so that new employees are aware of it, and so that it is fresh in the minds of all employees.

FN81. *See Zubulake IV,* 220 F.R.D. at 218.

Second, counsel should communicate directly with the "key players" in the litigation, *i.e.,* the people identified in a party's initial disclosure and any subsequent supplementation thereto. [FN82] Because these "key players" are the "employees likely to have relevant information," [FN83] it is particularly important that the preservation duty be communicated clearly to them. As with the litigation hold, the key players should be periodically reminded that the preservation duty is still in place.

FN82. *See* Fed.R.Civ.P. 26(a)(1)(A).

FN83. *Zubulake IV,* 220 F.R.D. at 218.

***10** *Finally,* counsel should instruct all employees to produce electronic copies of their relevant active files. Counsel must also make sure that all backup media which the party is required to retain is identified and stored in a safe place. In cases involving a small number of relevant backup tapes, counsel might be advised to take physical possession of backup tapes. In other cases, it might make sense for relevant backup tapes to be segregated and placed in storage. Regardless of what particular arrangement counsel chooses to employ, the point is to separate relevant backup tapes from others. One of the primary reasons that electronic data is lost is ineffective communication with information technology personnel. By taking possession of, or otherwise safeguarding, all potentially relevant backup tapes, counsel eliminates the possibility that such tapes will be inadvertently recycled.

Kier v. UnumProvident Corp. [FN84] provides a disturbing example of what can happen when counsel and client do not effectively communicate. In that ERISA class action, the court entered an order on December 27, 2002, requiring UnumProvident to preserve electronic data, specifically including e-mails sent or received on six particular days. What ensured was a comedy of errors. First, before the court order was entered (but when it was subject to the common law duty to preserve) UnumProvident's technical staff unilaterally decided to take a "snapshot" of its servers instead of restoring backup tapes, which would have recovered the e-mails in question. (In fact, the snapshot was useless for the purpose of preserving these e-mails because most of them had already been deleted by the time the snapshot was generated.) Once the court issued the preservation order, UnumProvident failed to take any further steps to locate the e-mails, believing that the same person who ordered the snapshot would oversee compliance with the court order. But no one told him that.

FN84. No. 02 Civ. 8781, 2003 WL 21997747 (S.D.N.Y. Aug. 22, 2003).

Indeed, it was not until January 13, when senior UnumProvident legal personnel inquired whether there was any way to locate the e-mails referenced in the December 27 Order, that anyone sent a copy of the Order to IBM, who provided "email, file server, and electronic data related disaster recovery services to UnumProvident." [FN85] By that time, UnumProvident had written over 881 of the 1,498 tapes that contained backup data for the relevant time period. All of this led to a stern rebuke from the court. [FN86] Had counsel in *Kier* promptly taken the precautions set out above, the e-mails would not have been lost. [FN87]

FN85. *Id.* at *4.

FN86. *Id.* at *13 ("If UnumProvident had been as diligent as it should have been ... many fewer [backup] tapes would have been inadvertently overwritten."). Rather than order sanctions, the court recommended that the parties determine the feasibility of retrieving the lost data and the extent of prejudice to the plaintiffs so that an appropriate remedy could be determined.

FN87. *See also Metropolitan Opera Assoc., Inc. v. Local 100, Hotel Employees & Restaurant Employees International Union,* 212 F.R.D. 178,

> 222 (S.D.N.Y.2003) (ordering default judgment against defendant as a discovery sanction because "counsel (1) never gave adequate instructions to their clients about the clients' overall discovery obligations, [including] what constitutes a 'document' ...; (2) knew the Union to have no document retention or filing systems and yet never implemented a systematic procedure for document production or for retention of documents, including electronic documents; (3) delegated document production to a layperson who ... was not instructed by counsel[ ] that a document included a draft or other nonidentical copy, a computer file and an e-mail; ... and (5) ... failed to ask important witnesses for documents until the night before their depositions and, instead, made repeated, baseless representations that all documents had been produced.").

3. What Happened at UBS After August 2001?

As more fully described above, UBS's in-house counsel issued a litigation hold in August 2001 and repeated that instruction several times from September 2001 through September 2002. Outside counsel also spoke with some (but not all) of the key players in August 2001. Nonetheless, certain employees unquestionably deleted e-mails. Although many of the deleted e-mails were recovered from backup tapes, a number of backup tapes--and the e-mails on them--are lost forever. [FN88] Other employees, notwithstanding counsel's request that they produce their files on Zubulake, did not do so.

> FN88. *See Zubulake IV*, 220 F.R.D. at 218-19 ("By its attorney's directive in August 2002, UBS endeavored to preserve all backup tapes that existed in August 2001 (when Zubulake filed her EEOC charge) that captured data for employees identified by Zubulake in her document request, and all such monthly backup tapes generated thereafter. These backup tapes [all should have] existed in August 2002, because of UBS's document retention policy, which required retention for three years. In August 2001, UBS employees were instructed to maintain active electronic documents pertaining to Zubulake in separate files. Had these directives been followed, UBS would have met its preservation obligations by preserving one copy of all relevant documents that existed at, or were created after, the time when the duty to preserve attached. In fact, UBS employees did not comply with these directives.") (footnotes omitted).

a. UBS's Discovery Failings

***11** UBS's counsel--both in-house and outside--repeatedly advised UBS of its discovery obligations. In fact, counsel came very close to taking the precautions laid out above. *First,* outside counsel issued a litigation hold in August 2001. The hold order was circulated to many of the key players in this litigation, and reiterated in e-mails in February 2002, when suit was filed, and again in September 2002. Outside counsel made clear that the hold order applied to backup tapes in August 2002, as soon as backup tapes became an issue in this case. *Second,* outside counsel communicated directly with many of the key players in August 2001 and attempted to impress upon them their preservation obligations. *Third,* and finally, counsel instructed UBS employees to produce copies of their active computer files. [FN89]

> FN89. Kim testified that she was not so instructed.

To be sure, counsel did not fully comply with the standards set forth above. Nonetheless, under the standards existing at the time, counsel acted reasonably to the extent that they directed UBS to implement a litigation hold. Yet notwithstanding the clear instructions of counsel, UBS personnel failed to preserve plainly relevant e-mails.

b. Counsel's Failings

On the other hand, UBS's counsel are not entirely blameless. "While, of course, it is true that counsel need not supervise every step of the document production process and may rely on their clients in some respects," [FN90] counsel is responsible for coordinating her client's discovery efforts. In this case, counsel failed to properly oversee UBS in a number of important ways, both in terms of its duty to

locate relevant information and its duty to preserve and timely produce that information.

FN90. *Metropolitan Opera*, 212 F.R.D. at 222.

With respect to locating relevant information, counsel failed to adequately communicate with Tong about how she stored data. Although counsel determined that Tong kept her files on Zubulake in an "archive," they apparently made no effort to learn what that meant. A few simple questions--like the ones that Zubulake's counsel asked at Tong's re-deposition--would have revealed that she kept those files in a separate *active* file on her computer.

With respect to making sure that relevant data was retained, counsel failed in a number of important respects. *First,* neither in-house nor outside counsel communicated the litigation hold instructions to Mike Davies, a senior human resources employee who was intimately involved in Zubulake's termination. *Second,* even though the litigation hold instructions were communicated to Kim, no one ever asked her to produce her files. And *third,* counsel failed to protect relevant backup tapes; had they done so, Zubulake might have been able to recover some of the e-mails that UBS employees deleted.

In addition, if Varsano's deposition testimony is to be credited, he turned over "all of the e-mails that [he] received concerning Ms. Zubulake." [FN91] If Varsano turned over these e-mails, then counsel must have failed to produce some of them. [FN92]

FN91. Varsano Dep. at 289.

FN92. I have no reason not to credit Varsano's testimony, given that he is a human resources employee who is not implicated in the alleged discrimination against Zubulake.

***12** In sum, while UBS personnel deleted e-mails, copies of many of these e-mails were lost or belatedly produced as a result of counsel's failures.

c. Summary

Counsel failed to communicate the litigation hold order to all key players. They also failed to ascertain each of the key players' document management habits. By the same token, UBS employees--for unknown reasons--ignored many of the instructions that counsel gave. This case represents a failure of communication, and that failure falls on counsel and client alike.

At the end of the day, however, the duty to preserve and produce documents rests on the party. Once that duty is made clear to a party, either by court order or by instructions from counsel, that party is on notice of its obligations and acts at its own peril. Though more diligent action on the part of counsel would have mitigated some of the damage caused by UBS's deletion of e-mails, UBS deleted the e-mails in defiance of explicit instructions not to.

Because UBS personnel continued to delete relevant e-mails, Zubulake was denied access to e-mails to which she was entitled. Even those e-mails that were deleted but ultimately salvaged from other sources (*e.g.,* backup tapes or Tong and Kim's active files) were produced 22 months after they were initially requested. The effect of losing potentially relevant e-mails is obvious, but the effect of late production cannot be underestimated either. "[A]s a discovery deadline ... draws near, discovery conduct that might have been considered 'merely' discourteous at an earlier point in the litigation may well breach a party's duties to its opponent and to the court." [FN93] Here, as UBS points out, Zubulake's instant motion "comes more than a year after the Court's previously imposed March 3, 2003 discovery cutoff." [FN94] Although UBS attempts to portray this fact as evidence that Zubulake is being overly litigious, it is in fact a testament to the time wasted by UBS's failure to timely produce all relevant and responsive information. With the discovery deadline long past, UBS "was under an obligation to be *as cooperative as possible.*" [FN95] Instead, the extent of UBS's spoliation was uncovered by Zubulake during court-ordered re-depositions.

FN93. *Residential Funding*, 306 F.3d at 112.

FN94. Defendants' Memorandum of Law in Opposition to Plaintiff's Motion for Sanctions ("Def.Mem.") at 3.

FN95. *Residential Funding*, 306 F.3d at 112 (emphasis in original); *see also id.* (suggesting that breach of that obligation might "constitute[ ] sanctionable misconduct in [its] own right").

I therefore conclude that UBS acted wilfully in destroying potentially relevant information, which resulted either in the absence of such information or its tardy production (because duplicates were recovered from Kim or Tong's active files, or restored from backup tapes). Because UBS's spoliation was willful, the lost information is presumed to be relevant. [FN96]

FN96. *See Kronisch*, 150 F.3d at 126 ("It is a well-established and long-standing principle of law that a party's intentional destruction of evidence relevant to proof of an issue at trial can support an inference that the evidence would have been unfavorable to the party responsible for its destruction.") (cited in *Residential Funding*, 306 F.3d at 109); *see also Residential Funding*, 306 F.3d at 109 ("[A] showing of [wilfullness or] gross negligence in the destruction *or untimely production* of evidence will in some circumstances suffice, standing alone, to support a finding that the evidence was unfavorable to the grossly negligent party.") (emphasis added); *see also id.* at 110 ("Just as the intentional or grossly negligent *destruction* of evidence in bad faith can support an inference that the destroyed evidence was harmful to the destroying party, so, too, can intentional or grossly negligent acts that hinder discovery support such an inference ....") (emphasis in original).

B. Remedy

Having concluded that UBS was under a duty to preserve the e-mails and that it deleted presumably relevant e-mails wilfully, I now consider the full panoply of available sanctions. [FN97] In doing so, I recognize that a major consideration in choosing an appropriate sanction--along with punishing UBS and deterring future misconduct--is to restore Zubulake to the position that she would have been in had UBS faithfully discharged its discovery obligations. [FN98] That being so, I find that the following sanctions are warranted.

FN97. *See Fujitsu*, 247 F.3d at 436 (holding that the choice of sanctions for spoliation and failure to produce evidence "is confined to the sound discretion of the trial judge, and is assessed on a case-by-case basis").

FN98. *See West*, 167 F.3d at 779 (explaining that the chosen sanction should "(1) deter parties from engaging in spoliation; (2) place the risk of an erroneous judgment on the party who wrongfully created the risk; and (3) restore 'the prejudiced party to the same position he would have been in absent the wrongful destruction of evidence by the opposing party.' ') (quoting *Kronisch*, 150 F.3d at 126); *see also Pastorello v. City of New York*, No. 95 Civ. 470, 2003 WL 1740606, at *8 (S.D.N.Y. Apr. 1, 2003).

***13** *First*, the jury empanelled to hear this case will be given an adverse inference instruction with respect to e-mails deleted after August 2001, and in particular, with respect to e-mails that were irretrievably lost when UBS's backup tapes were recycled. No one can ever know precisely what was on those tapes, but the content of e-mails recovered from other sources--along with the fact that UBS employees wilfully deleted e-mails--is sufficiently favorable to Zubulake that I am convinced that the contents of the lost tapes would have been similarly, if not more, favorable. [FN99]

FN99. *Cf. Chambers v. TRM Copy Centers Corp.*, 43 F.3d 29, 37 (2d Cir.1994) (" '[e]mployers are rarely so cooperative as to include a notation in the personnel file' that their actions are motivated by factors expressly forbidden by law. Because an employer who discriminates is unlikely to leave a 'smoking gun' attesting to a discriminatory intent, a victim of discrimination is seldom able to prove his claim by direct evidence, and is usually constrained to rely on circumstantial evidence.") (quoting *Ramseur v. Chase Manhattan Bank*, 865 F.2d 460, 464 (2d Cir.1989)) (citations omitted); *Dister v. Continental Group, Inc.*, 859 F.2d 1108, 1112 (2d

Cir.1988) ("[In] reality ... direct evidence of discrimination is difficult to find precisely because its practitioners deliberately try to hide it. Employers of a mind to act contrary to law seldom note such a motive in their employee's personnel dossier.")

Note that I am *not* sanctioning UBS for the loss of the tapes (which was negligent), but rather for its *willful* deletion of e-mails. Those e-mails happen to be lost forever because the tapes that might otherwise have contained them were lost.

Second, Zubulake argues that the e-mails that *were* produced, albeit late, "are brand new and very significant to Ms. Zubulake's retaliation claim and would have affected [her] examination of every witness ... in this case." [FN100] Likewise, Zubulake claims, with respect to the newly produced e-mails from Kim and Tong's active files, that UBS's "failure to produce these e-mails in a timely fashion precluded [her] from questioning any witness about them." [FN101] These arguments stand unrebutted and are therefore adopted in full by the Court. Accordingly, UBS is ordered to pay the costs of any depositions or re-depositions required by the late production.

FN100. Tr. at 10.

FN101. Pl. Mem. at 10.

Third, UBS is ordered to pay the costs of this motion. [FN102]

FN102. Fed.R.Civ.P. 37(b)(2).

Finally, I note that UBS's belated production has resulted in a self-executing sanction. Not only was Zubulake unable to question UBS's witnesses using the newly produced e-mails, but UBS was unable to prepare those witnesses with the aid of those e-mails. Some of UBS's witnesses, not having seen these e-mails, have already given deposition testimony that seems to contradict the newly discovered evidence. For example, if Zubulake's version of the evidence is credited, the e-mail from Davies acknowledging receipt of Zubulake's EEOC charge at 11:06 AM on August 21, 2001, puts the lie to Davies' testimony that he had not seen the charge when he spoke to Orgill--a conversation that was reflected in an e-mail sent at 2:02 PM. Zubulake is, of course, free to use this testimony at trial.

These sanctions are designed to compensate Zubulake for the harm done to her by the loss of or extremely delayed access to potentially relevant evidence. [FN103] They should also stem the need for any further litigation over the backup tapes.

FN103. Another possible remedy would have been to order UBS to pay for the restoration of the remaining backup tapes. Zubulake, however, has conceded that further restoration is unlikely to be fruitful. *See* Tr. at 30-31.

C. Other Alleged Discovery Abuses

In addition to the deleted (and thus never- or belatedly produced) e-mails, Zubulake complains of two other perceived discovery abuses: the destruction of a September 2001 backup tape from Tong's server, and the belated production of a UBS document retention policy.

1. Tong's September 2001 Backup Tape

Zubulake moves for sanctions because of the destruction of Tong's September 2001 backup tape. In *Zubulake III,* I ordered UBS to pay 75% of the cost of restoring certain backup tapes. [FN104] Understandably, one of the tapes that Zubulake chose to restore was Tong's tape for August 2001, the month that Zubulake filed her EEOC charge. That tape, however, had been recycled by UBS. Zubulake then chose to restore Tong's September 2001 tape, on the theory that "the majority of the e-mails on [the August 2001] tape are preserved on the September 2001 tape." [FN105] When that tape was actually restored, however, it turned out not to be the September 2001 tape at all, but rather Tong's October 2001 tape. This tape, according to UBS, was simply mislabeled. [FN106]

FN104. *See Zubulake III,* 216 F.R.D. at 291.

FN105. *Zubulake IV,* 220 F.R.D. at 221.

FN106. *See* Def. Mem. at 12 n. 8; Tr. at 57

(attributing mislabeling of tape to "human error"); *see also* Declaration of James E. Gordon, Vice President of Pinkerton Consulting & Investigations, Inc. (detailing UBS's investigation into the missing September 2001 tape), Ex. I to the 5/14/04 Declaration of Norman C. Simon ("Simon Decl.").

***14** Zubulake has already (unintentionally) restored Tong's October 2001 tape, which should contain the majority of the data on the September 2001 tape. In addition, UBS has offered to pay to restore Varsano's backup tape for August 2001, which it has and which has not yet been restored. [FN107] Varsano was Tong's HR counterpart in the United States, and was copied on many (but not all) of the e-mails that went to or from Tong. [FN108] These backup tapes, taken together, should recreate the lion's share of data from Tong's August 2001 tape. UBS must therefore pay for the restoration and production of relevant e-mails from Varsano's August 2001 backup tape, and pay for any re-deposition of Tong or Varsano that is necessitated by new e-mails found on that tape.

FN107. *See* Tr. at 58-59.

FN108. *See id.*

2. The July 1999 Record Management Policy

Zubulake also moves for sanctions in connection with what she refers to as "bad faith discovery tactics" on the part of UBS's counsel. [FN109] In particular, Zubulake complains of a late-produced record management policy. [FN110] The existence of this policy was revealed to Zubulake at Varsano's second deposition on January 26, 2004, [FN111] at which time Zubulake called for its production. [FN112] Zubulake twice reiterated this request in writing, in the hopes that she would have the policy in time for Hardisty's deposition on February 5, 2004. UBS did not produce the policy, however, until February 26, 2004. [FN113]

FN109. Pl. Mem. at 8.

FN110. *See* June 1999 UBS Record Management Policy for the Americas Region (the "June 1999 policy"), Ex. M to the Batson Aff.

FN111. *See* Varsano Dep. at 489-94.

FN112. *See id.* at 494.

FN113. *See* 4/26/04 Letter from Norman Simon, counsel to UBS, to James Batson, Ex. N to the Batson Aff.

The late production of the July 1999 policy does not warrant sanctions at all. *First,* UBS's production of the policy was not late. Zubulake requested it at Varsano's deposition on January 26, 2004, and UBS produced it one month later, on February 26. The Federal Rules afford litigants thirty days to respond to document requests, [FN114] and UBS produced the policy within that time. The fact that Zubulake wanted the document earlier is immaterial--if it was truly necessary to confront Hardisty with the policy, then his deposition should have been rescheduled or Zubulake should have requested relief from the Court. [FN115] Not having done so, Zubulake cannot now complain that UBS improperly delayed its production of that document.

FN114. *See* Fed.R.Civ.P. 34(b).

FN115. *See id.* (reserving to the court the authority to lengthen or shorten the time in which a party must respond to a document request).

Second, even if UBS was tardy in producing the policy, Zubulake has not demonstrated that she was prejudiced. She suggests that she would have used the policy in the depositions of Hardisty and perhaps Chapin, but does not explain how. Nor is it at all clear how Zubulake might have used the policy. With respect to e-mail, the policy states: "Email is another priority. We will have a separate policy regarding email with appropriate reference or citation in this policy and/or retention schedules." [FN116] Prior to these depositions, Zubulake had a number of UBS document retention policies that post-dated the June 1999 Policy. [FN117]

FN116. June 1999 Policy § 3.2.

FN117. *See* Retention of Back-up Tapes of Email Servers (dated June 2001), Ex. H to Simon Decl.; Retention of Back-Up Tapes of E-mail and

Interchange (dated October 2001), Ex. K to Simon Decl.; *see also* Ex. M to Batson Aff. (consisting of four UBS document retention policies, including one entitled "Use of Electronic Mail, Chat and Text Messaging," dated November 2002).

V. CONCLUSION

In sum, counsel has a duty to effectively communicate to her client its discovery obligations so that all relevant information is discovered, retained, and produced. In particular, once the duty to preserve attaches, counsel must identify sources of discoverable information. This will usually entail speaking directly with the key players in the litigation, as well as the client's information technology personnel. In addition, when the duty to preserve attaches, counsel must put in place a litigation hold and make that known to all relevant employees by communicating with them directly. The litigation hold instructions must be reiterated regularly and compliance must be monitored. Counsel must also call for employees to produce copies of relevant electronic evidence, and must arrange for the segregation and safeguarding of any archival media (*e.g.*, backup tapes) that the party has a duty to preserve.

***15** Once counsel takes these steps (or once a court order is in place), a party is fully on notice of its discovery obligations. If a party acts contrary to counsel's instructions or to a court's order, it acts at its own peril.

UBS failed to preserve relevant e-mails, even after receiving adequate warnings from counsel, resulting in the production of some relevant e-mails almost two years after they were initially requested, and resulting in the complete destruction of others. For that reason, Zubulake's motion is granted and sanctions are warranted. UBS is ordered to:

1. Pay for the re-deposition of relevant UBS personnel, limited to the subject of the newly-discovered e-mails;
2. Restore and produce relevant documents from Varsano's August 2001 backup tape;
3. Pay for the re-deposition of Varsano and Tong, limited to the new material produced from Varsano's August 2001 backup tape; [FN118] and

FN118. Rulings numbered (1) and (3) may both result in the re-deposition of Tong and Varsano. Obviously, each should only be re-deposed once.

4. Pay all "reasonable expenses, including attorney's fees," [FN119] incurred by Zubulake in connection with the making of this motion.

FN119. Fed.R.Civ.P. 37(b)(2).

In addition, I will give the following instruction to the jury that hears this case:

> You have heard that UBS failed to produce some of the e-mails sent or received by UBS personnel in August and September 2001. Plaintiff has argued that this evidence was in defendants' control and would have proven facts material to the matter in controversy.
>
> If you find that UBS could have produced this evidence, and that the evidence was within its control, and that the evidence would have been material in deciding facts in dispute in this case, you are permitted, but not required, to infer that the evidence would have been unfavorable to UBS.
>
> In deciding whether to draw this inference, you should consider whether the evidence not produced would merely have duplicated other evidence already before you. You may also consider whether you are satisfied that UBS's failure to produce this information was reasonable. Again, any inference you decide to draw should be based on all of the facts and circumstances in this case. [FN120]

FN120. This instruction was adapted from LEONARD B. SAND ET AL., MODERN FEDERAL JURY INSTRUCTIONS 75-7 (2004); *see also* *Zimmerman v. Associates First Capital Corp.*, 251 F.3d 376, 383 (2d Cir.2001) (affirming district court's use of a similar charge); *cf.* New York Pattern Jury Instructions--Civil 1:77 (3d ed.2004).

The Clerk is directed to close this motion [number 43 on the docket sheet]. Fact discovery shall close on October 4, 2004. A final pretrial conference is scheduled for 4:30 PM on October 13, 2004, in Courtroom 15C. If either party believes that a dispositive motion is appropriate, that date will be converted to a pre-motion conference.

VI. POSTSCRIPT

The subject of the discovery of electronically stored information is rapidly evolving. When this case began more than two years ago, there was little guidance from the judiciary, bar associations or the academy as to the governing standards. Much has changed in that time. There have been a flood of recent opinions--including a number from appellate courts--and there are now several treatises on the subject. [FN121] In addition, professional groups such as the American Bar Association and the Sedona Conference have provided very useful guidance on thorny issues relating to the discovery of electronically stored information. [FN122] Many courts have adopted, or are considering adopting, local rules addressing the subject. [FN123] Most recently, the Standing Committee on Rules and Procedures has approved for publication and public comment a proposal for revisions to the Federal Rules of Civil Procedure designed to address many of the issues raised by the discovery of electronically stored information. [FN124]

FN121. *See* MICHAEL ARKFELD, ELECTRONIC DISCOVERY AND EVIDENCE (2003); ADAM I. COHEN & DAVID J. LENDER, ELECTRONIC DISCOVERY: LAW AND PRACTICE (2004).

FN122. *See* Memorandum from Gregory P. Joseph & Barry F. McNeil, *Electronic Discovery Standards--Draft Amendments to ABA Civil Discovery Standards* (Nov. 17, 2003), available at http://www.abanet.org/litigation/taskforces/electronic/document.pdf; The Sedona Conference, *The Sedona Principles: Best Practices Recommendations & Principles for Addressing Electronic Document Production* (January 2004), available at http://www.thesedonaconference.org/publications_html.

FN123. *See, e.g.,* E.D. Ark. Local Rule 26.1; W.D. Ark. Local Rule 26.1; D. Wy. Local Rule 26.1; D.N.J. Local Rule 26.1(d); *see also* Memorandum from the Ninth Circuit Advisory Board, *Proposed Model Local Rule on Electronic Discovery,* available at http://www.krollontrack.com/LawLibrary/Statutes/9thCirDraft.pdf, D. Kan. *Electronic Discovery Guidelines;* D. Del. *Default Standards for Discovery of Electronic Document.* In addition, a number of states have adopted rules governing electronic discovery. *See, e.g.,* Miss. R. Civ. P. 26; Tex.R. Civ. P. 193.3, 196.4. With the exception of the proposed Ninth Circuit model rule, all of these rules are collected at http:// www.kenwithers.com/rulemaking/.

FN124. The proposals forwarded from the Civil Rules Advisory Committee to the Standing Committee can be found on pages 20-70 of the memorandum available at http:// www.kenwithers.com/rulemaking/civilrules/report051704.pdf. Those proposals were subsequently revised by the Standing Committee; the final text of the proposed rules that will be published for comment should be available some time in August 2004.

***16** Now that the key issues have been addressed and national standards are developing, parties and their counsel are fully on notice of their responsibility to preserve and produce electronically stored information. The tedious and difficult fact finding encompassed in this opinion and others like it is a great burden on a court's limited resources. The time and effort spent by counsel to litigate these issues has also been time-consuming and distracting. This Court, for one, is optimistic that with the guidance now provided it will not be necessary to spend this amount of time again. It is hoped that counsel will heed the guidance provided by these resources and will work to ensure that preservation, production and spoliation issues are limited, if not eliminated.

SO ORDERED:

2004 WL 1620866 (S.D.N.Y.), 94 Fair Empl.Prac.Cas. (BNA) 1, 85 Empl. Prac. Dec. P 41,728

Motions, Pleadings and Filings (Back to top)

- 1:02CV01243 (Docket) (Feb. 15, 2002)

END OF DOCUMENT

EXHIBIT 40

From: Marshall Brumer
Sent: Wednesday, December 03, 1997 12:39 PM
To: Carl Stork (Exchange); Mike Porter
Subject: RE: (InfoWorld Electric) Intel media framework for Java takes shape

i am actually asking internally here more than at intel. ericeng has done a deal with them and we agreed that they could complete the work they are already doing. they are claiming this release was part of the deal with their partners and were obligated to do this. if that is eric's position also, then we cannot balk much except to say that we want to understand any/all other areas this will be coming in.

---- Original Message ----
From: Carl Stork (Exchange)
Sent: Wednesday, December 03, 1997 8:50 AM
To: Marshall Brumer; Mike Porter
Subject: RE: (InfoWorld Electric) Intel media framework for Java takes shape

it shouldn't be too hard to get this info - after all intel's done a press release. it would be valuable to just call up barbara dawson, you may get an unbiased view.

there seems to be so much anti-MS activity at Intel - maybe it isn't a coordinated set of things, but clearly it is being allowed to brew/fester with exec encouragement.

---- Original Message ----
From: Marshall Brumer
Sent: Sunday, November 30, 1997 8:51 PM
To: Carl Stork (Exchange); Mike Porter
Subject: RE: (InfoWorld Electric) Intel media framework for Java takes shape

already asked intel about this and still no answer. fyi - billg also flagged low priority. you'll be on the mail when we resolve with him.

---- Original Message ----
From: Carl Stork (Exchange)
Sent: Friday, November 28, 1997 7:48 PM
To: Marshall Brumer; Mike Porter
Subject: FW: (InfoWorld Electric) Intel media framework for Java takes shape

Boy this sounds random. Are you aware of what this is? More friction for Chrome?

---- Original Message ----
From: Laura Fonda
Sent: Tuesday, November 25, 1997 11:29 AM
To: Internet Client and Developer News
Subject: (InfoWorld Electric) Intel media framework for Java takes shape

Summary: InfoWorld Electric reports that as part of an effort to position Intel processors as a major platform for Java applications, Intel has begun licensing a Media Framework for Java to independent software vendors that includes JavaBeans components for video, 3-D surround sound, and animation.

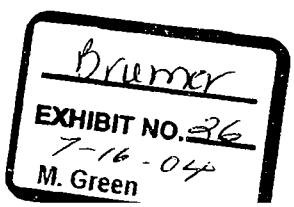
http://www.infoworld.com/cgi-bin/displayStory.pl?971124.eframework.htm

News from your Library -

Intel media framework for Java takes shape

By Niall McKay
InfoWorld Electric

As part of an effort to position Intel processors as a major platform for Java applications, Intel has begun licensing a Media Framework for Java to independent software vendors that includes JavaBeans components for video, 3-D surround sound, and animation.



Called the Intel Simple Video Bean for Java, the Intel Spatial Audio for Java, and the Intel Animation for Java, the products are part of the microprocessor giant's Java-development operation.

"We were one of the first licensees of Sun's Java specification in 1995," said Barbara Dawson, director of software strategies for Intel's desktop division. "We develop Java technology, optimize it for the Intel platform, and then either give that technology to JavaSoft or to one of the many Java ISVs working on the Intel platform."

Other software technologies under development at the company's Oregon facility include a Java virtual machine, a just-in-time compiler, and some dynamic compilation technology. Intel officials say it is complementary to Sun's HotSpot compiler technology due in the so-called Version 2.0 of the Java Development Kit. The HotSpot compiler is a key technology under development at Sun that promises to make Java applications run as fast as C++ applications.

Intel's media JavaBeans are part of the company's Media Framework for Java (MFJ), which is an implementation of the Java Media Framework, co-developed by Intel, Silicon Graphics, and JavaSoft.

MFJ enables Microsoft, Netscape, and Sun Java-execution environments to run Java applets containing audio-and-video media natively on the Intel platform.

Intel's media JavaBeans are available in two configurations, as a software developer's kit and as a run-time version.

Currently, licensing the technology is free, but this may change, according to Dawson.

Digital Harbor, a Java ISV based in Orem, Utah, is bundling Intel's Simple Player Bean in its .WAV productivity application environment.

"Intel's video Bean will enable our customers to embed video clips into documents," said Roger Bell, the vendor's president.

One analyst was skeptical about the Java/video combination.

"Using Java and video in the same application would make for a less-than-interactive experience, especially over the Internet," said Don DePalma, an analyst at Forrester Research, in Cambridge, Mass. "But this is a future's thing, and it's good to see one of the large vendors create implementations of the Java Media Framework."

Intel's Media Framework for Java uses supports .AVI, .WAV, .MOV, .AU, and .MPEG file formats.

Intel Corp., in Santa Clara, Calif., can be reached at (408) 987-8080 or http://www.intel.com/.

EXHIBIT 41

7/97

Bob Mu conversation.

Was cordial but pointed.

His basic message was the wanted us out of core AV.

He said that MSFT had concluded that fundamental datatypes like words and numbers were in essence a core part of the operating system. That in fact office and Windows were one, since if what an operating system did was to "display" things, then Word/Excel (office) were part of the OS. And since the world was going networked, that applied to browsers.

He said that he thought video was one of the most exciting datatypes – since monitors were visual things, video had to be though of like "words", and microsoft had to control this franchise. He said that anyone who competed against MSFT in the operating system "lost" – that there were only two people left in town who still competed against msft as a potential OS vendor – Sun and Oracle – and the rest had been obliterated, and MSFT was targeting these last two. He referenced their scalability day as part of killing Sun. So the message was that if wanted to do value add on top of their video, fine; if not, we were an OS contender and msft would target us for obliteration. He cited PeopleSoft as ok – he said adobe had pretensions of OS, but had basically backed off.

Per my prepared notes, I said that we weren't moving out because their baseline solution was so bad and because the "add-on" market was small, and that maybe in a couple years we'd move "up" when/if core A, V delivery was commoditized by us, MSFT, or technology like mpeg on motherboards.

EXHIBIT 42

Karl Neumann (LCA)

From: Russell Stockdale
Sent: Thursday, July 03, 1997 6:27 PM
To: Anthony Bay; Michael Ahern; Rich Tong; Bob Muglia (Exchange); Linda O'Neill (Waggener Edstrom); Lynann Bradbury (Waggener Edstrom)
Cc: Bob Muglia (Exchange); Jim Durkin
Subject: RE: my views on PN issues.. and please keep me in the loop on PN negotiations

Importance: High

I have to raise a red flag on this release. Here's what I've seen in the last 24 hours:

- Bruce sent mail saying that the other deal (ASF format) wasn't going well and comments related to it s/b pulled from the release
- Leigh, their PR person, sent mail with a bunch of new demands such as Billg videotaped comments
- Bruce has said in both mail and through Leigh that the key message here is "both companies will be building on RealAudio and RealVideo as the basis of their products." This is clearly the message they intend to send.

Net/net we are getting farther apart, and the release is serving as a vehicle for bringing out these differences. We are in a difficult position here because the contract we signed requires us to announce this deal by the 16th, and the

I see three choices:
Rewrite the release, bas

-----Original Message-----
From: Anthony Bay
Sent: Thursday, July 03, 1997 4:29 PM
To: Michael Ahern; Russell Stockdale
Cc: Bob Muglia (Exchange)
Subject: my views on PN issues.. and please keep me in the loop on PN negotiations

i have not seen mail but have heard about the blowups. please keep me copied on these threads.

my view is pretty basic. we were very very clear with PN that our relationship with them had as a core aspect their moving to a jointly defined version of ASF and support of direct media and directshow. that any bundling deals were tied to this.

they appear to be stalling on the chris phillips deal to have an out to not include asf & directshow in our announce. that must not happen. we should make closing the chris phillips deal before the 14th a shared goal with PN and include this info in the announce.

if we are to establish a good working relationship with PN this needs to be the basis.. and their current behavior is not encouraging.

our announcement must highlight both that we are licensing their technology at that they are agreeing to move to ASF and directshow/direct media. if they refuse then i would offer them two releases to review.. one like the one we have drafted which includes ASF and directshow and warm fuzzies about working together and a different, less friendly one where we announce that we are licensing their code & trademarks in order to ship superset products which are backward compatible with PN allowing their current customers to easily migrate to our platforms.

this bullshit on their side must stop. good faith would lead to an announce similar to the press release already drafted.. and quick closing of the chris philips deal in a way which gives ericeng the ability he has indicated he needs. none of this was a blocking issue before the larger deal and should not be now unless PN is trying to game us. i still hope we can make this relationship work as conceived during the midnight negotiations.. where PN licenses us platform technology which we integrate into our products sell in volume so they can build added value products on top.

EXHIBIT 43

From: Will Friedman
Sent: Wednesday, April 12, 2000 1:32 PM
To: Tony Bawcutt
Cc: Bill Schiefelbein; Denmark West
Subject: Revisiting Burst.com

Importance: High

Hi Tony,

As you know when it comes to Burst, we have been skeptical of their technology for a variety of reasons. In our last major exchange, we had asked them to show us some customers who were satisfied with their solution.

I had a chance to talk to Burst (Mike Moskowitz, VP BusDev) at NAB and got an update on their customers and their plan. In addition, BillSch and I had a call with @home today in which we discussed @home's opinion of the Burst technology.

Here are the key takeaways from @home:

- @home is impressed with Burst and will be getting into trials and is optimistic about the chances of using their service. They like the Burst solution better than the Inktomi cache solution they were previously evaluating. They like Burst because:
  1. They believe it provides an improvement in quality for their cable modem customers
  2. They like the download and play model in general because it allows them to have predictable network traffic. They believe Burst effectively "maintains the download and play model" with streaming. In general the key benefit they see are the server side tools that allow them to regulate the bandwidth of delivery.
  3. They believe it improves their customer availability because it supports fail-over on server side
  4. They like the cost proposition better than the cost of deploying Inktomi caches to all of their 20 data centers and various head-ends.
- @home is expecting to support Windows Media Player rather than Real because of this technology, because Burst works with our player but not with Real's.

Here are the key takeaways from Burst:

- They view us as strategic partner and are pushing our player because of its plug in model. At the same time, they are pushing the fact that they can pipe content to a Windows Media Player from a Linux or Solaris box and the content isn't necessarily in our format. Their comment was "this is good for MS because you can't do this but we can do it for you and help your player adoption."
- They are moving to a model where they run burst as an ASP service rather than selling the servers. @home liked this inasmuch as it lets them do a trial without having to deploy hardware.
- Burst claims that AOL/Spinner (their radio application) want to use Burst and play to switch to an embedded WMP so that they can use the burst solution. Burst says that Spinner's biggest problem is scalability and they believe Burst will help.
- Apple is aggressively courting burst to support QT, though Burst has not seen as much demand for QT compared to ASF.
- The demo that they did for us here failed not because of their service but because of an old WMP client installation (5.0 instead of 6.4) . Demo worked well at NAB.
- One key challenge for them is client distribution. They could clearly get this through a variety of partnerships which would probably not be strategic for us (e.g., AOL). They are planning a U2 (the band) event to generate downloads in meantime. U2 is on their board.

Net net is that some of the largest customers in the broadband space are considering switching to supporting our player because they like they Burst solution. At same time, these customers may deploy Linux/Solaris servers or use the Burst ASP service based on Linux.

After further discussion, Bill and I believe we should revisit our stance with regard to them and even consider acquisition after further due diligence. The reasons for this are:

- Though we have been planning many of the features that burst provides today in our next version, their technology would give us time to market advantage on these features, and we could refocus our developers on other strategic initiatives.
- We could increase Burst's focus on Windows platforms on the server side and Windows Media formats
- Their pitch is helping them win some of the largest NetOps and we could have them continue to make this pitch to win in the broadband space, again with a better focus on our platform.
- We might be able to obtain some development, bus dev, and marketing talent (though clearly due diligence is needed here)

We don't have a good sense of the value of their patent portfolio but I have requested the patents back from our counsel BartE and I will review them assuming he gives me the go-ahead.

Next steps are:

- Review patents **(Wfried)**
- Try to schedule call ASAP with AOL/Spinner via WPoole to verify they are really where what Burst says they are. **(Tony**, can you talk to WPoole about this since he manages that relationship?)
- Send small delegation of PMs/deployment staff down to Burst to due further diligence on their technology operations and staff in the context of expanded partnership opportunities (of course not discussing acquisition at this point). **BillSch** do you want to arrange this?

Acquisition risks are (possibly premature to think about but are on my mind.)

- Possible bidding war with Apple. Real could get into game too.
- Location – they are based in SF.
- What to do with CEO – 1) he rubbed most people here the wrong way in initial talks and 2) WPoole already has too many reports.

EXHIBIT 44

From: Bret O'Rourke (Exchange)
Sent: Thursday, October 28, 1999 10:51 AM
To: Anthony Bay (Exchange); Will Poole; Windows Media Mktg Fulltime Employees; Windows Media Program Management; Craig Eisler's Direct Reports; John Enslein Direct Reports; Chadd Knowlton's Direct Reports
Subject: Meeting report: IVT (BurstWare)

Attendees

IVT: Richard Lang – CEO
Tom Koshy – COO
Kyle Faulkner - CTO
Frank Schwartz – VP BizDev
Michael Moskowitz – Director of Strategic Relations

MS: Will Poole
Will Friedman
David Del Val
Bill Schiefelbein
Bret O'Rourke

Summary

Burstware is a smart, faster than real-time, patented, file transfer and playback mechanism. It consists of a server and protocols and uses the Windows Media player and JMF to render streams. While their technology demos well, the basic premise of blasting bits as fast as you can to a player is fraught with issues. Our assessment is that the technology will not work in most environments and for most scenarios that customers require. While we plan to a press announcement with them on their integration with WMP, we are very hesitant to do integrate, use, or license their technology. The current only action item is for IVT to come back to Microsoft with an assessment of how Burstware actually lowers the cost of MBs transferred vs. cache/proxy mechanisms today (i.e. Akamai and Sandpiper solutions).

Details

Objective of Meeting

IVTs objectives for the meeting were: 1) to see if Microsoft wanted to participate in a press release in two weeks announcing Burstware's support for the Windows Media Player and 2) to what level Microsoft wanted to partner with IVT. For the second objective, IVT listed four areas of possible collaboration:

1. The player market – integrate Burstware into WMP
2. Hosting – IVT will be moving into the hosting business
3. IP licensing – IVT has 15 patents either granted or pending in the US and internationally
4. The server market – integrate Burstware into WMT

Overview of Technology

IVT produces Burstware technology which is a smart, faster than real-time, patented, file transfer and playback mechanism. As bandwidth on the Internet increases and storage costs decrease, their technology "takes off from where streaming media stops." The software consists primarily of a server and TCP control and data protocols. They use WMP and JMF (Java Media Foundation) as their players (for WMP they wrote a Dshow filter). They have not ported to the RN or Apple players yet but are looking into RN next. They're fairly agnostic to what they stream. They demonstrated playback of MPEG1, MPEG2, MP3, and ASF. Burstware is a fast intelligent file copier with local playback of a file on the player side. The server will use all available bandwidth on the net to accomplish the file copy. You can set a max bandwidth for the server so that an entire LAN is not maxed out. As clients connect, the server divides the available bandwidth by the total # of players.

IVT claims that you only need a couple well positioned Burstware servers on the Internet to handle *anyone* that requests *any content* from a Burstware server. They claim you don't need cache/proxy services on the Internet. Their technology obviates the need for "chasing the end of the cloud." Along with this technical advantage, IVT claims they cost less per MB transferred than these services because of the cost of these services incur for build out.

Our Assessment

IVTs pitch for Burstware appears to be centered around high quality, high bitrate, entertainment-oriented content. Because of this, Burstware requires the link bandwidth between the player and server to far exceed the bitrate required for a particular file. This is not always possible nor the best thing in many cases. For the enterprise, there's plenty of

bandwidth but it's not clear IT admins would want their bandwidth consumed is this way. For instance, if you configured Burstware to stream at a max 2Mbps then it would consume that bandwidth nearly all the time. For the Internet, Burstware does not appear to work given the current condition on the Internet. DSL and cable modems today provide barely enough bandwidth to support the minimum 500kbps quality that is required for "entertainment-quality" content. In order to get a 300kbps file across a 384kbps link nearly requires the full pipe with thinning, etc... to keep the stream looking smooth. In this environment, Burstware doesn't work.

While they have nice demos that are compelling, our assessment is that this technology does not meet the requirements of many of our key scenarios. Under the right conditions, their technology would work great but these conditions are not prevalent in most the environments needing/using streaming media today.

It should be noted as well that this Burstware is lacking in so many areas – it's for on-demand content only, there's no authentication/authorization, they don't handle any kind of playlists or metafiles, they don't support MBR, etc, etc...

Additional Technical Information

Below is a quick summary of how Burstware technology works:

- *Clients connects to a load balancer called a "conductor" via the "burst" protocol* - The burst protocol is their own proprietary protocol – no plans to go RTSP anytime soon. A "conductor" figures load stats on the network - at that instant - and directs the player to an appropriate server. You can have redundant Burstware conductors and servers. Multiple conductors may be specified in the URL – i.e. burst://1.1.1.1;2.2.2.2/foo.asf.
- *Client connects to a Burstware server via the burst protocol, content is then copied to the player and played back* - A lot happens during this phase. First, the server determines what bitrate it should send packets. This is not actually necessary. They claim it's more efficient for the web page author to insert the bitrate of the content in the URL. It then begins "copying" these bits across the net at the rate. The client then begins buffering these bits. It can either buffer to memory (say 4MB) or to disk. In the case of disk buffer, they keep the entire file around instead of say 10 seconds worth. This enables a smooth rewind capability. You can FF as well. If the FF takes you past the point that is currently being cached, they will jump to that later point in the file. They're basically doing a partial file cache at that point.

EXHIBIT 45

Filed Under Seal

EXHIBIT 46

From: Will Poole
Sent: Wednesday, September 01, 1999 4:32 PM
To: Jim Allchin (Exchange)
Cc: Navin Chaddha; Anthony Bay (Exchange)
Subject: Need you support re broadband efforts

Importance: High

Jim, we're moving forward very fast with our broadband initiative. A few of the deals include investments in Edge Providers (Akami, iBeam, etc.) which we'd like you to bless from overall Win2k biz perspective. Here's the situation (as laid out by Navin) with the investments, with the specific request for you in #3 below. Akami is on a very short leash for financing -- we need your OK to invest at same valuation Cisco has invested at in the next day or so. I apologize for the short notice here -- things are moving fast as usual.

Attached at the bottom is the background on our BB initiative and on Akami if you want more detail.

1. WMT Adoption + Investment:
The edge providers are essential for WMT broadband rollout. We are looking at 3 main players in this space. Akamai, SandPiper and Ibeam. Akamai and Sandpiper are using terresterial networks while Ibeam is using Satellites to get content to the edge. Ibeam does the best for live streaming as it just bypasses the Internet. Ibeam is based on NT and our finance guys have agreed to invest in them at $75M pre-money. If we win Akamai, Sandpiper and Ibeam for WMT adoption then we will be ahead of Real in the broadband space as we can distribute content throught their networks and make them team up with all last mile guys. Akami is much more expensive -- more details below.

2. Result of the strategic investment from NT perspective (vs Sun/linux competition):
The strategic investment will help Akamai and Sandpiper to port their content distribution servers to NT. They do not have motivation to move to NT otherwise (besides WMT) as it causes delays to their current plans. Both these companies are filing for IPO and Akamai has already done that. The advantage of having their content distribution servers on NT is that they plan to distribute them for free to ISPs and into Super-POPs for major backbone providers. This will allow us to get NT into the network fabric of ISPs and Backbone providers by working on co-mktg programs as they will manage these servers.

3. Why you (jim) need to be involved is to confirm that the value of these deals is broader than WMT since the valuation is excessive on at least one deals:
The finance guys need to understand that this is a NT strategic partnership and not limited to WMT. In the case of Akamai their valuation is 1.2B+ and are filing for IPO. Cisco already invested $49M at the same valuation. Need you to confirm that deals are important for achieving his goals of getting NT into the network fabric of Netops. For example Sandpiper is using Inktomi cache and plans to give it to ISPs for free. Akami is linux based today and has adtl work going on with Apple. Finance (Amar) is fully engaged in the evaluation and ready to move if you confirm that there is value in having the next potential Inktomi infused with NT.

Lots more details on the overall WMT broadband initiative are below.

Navin

-----Original Message-----
From: Navin Chaddha

EXHIBIT 47

From: Mike Beckerman (Exchange)
Sent: Monday, September 13, 1999 2:54 PM
To: Bill Schiefelbein (Exchange); Anthony Bay (Exchange); Tom Honeybone (Exchange); Amir Majidimehr (Exchange); Bret O'Rourke (Exchange); Craig Eisler (Exchange)
Cc: Ming-Chieh Lee (Exchange); David del Val (Exchange)
Subject: RE: Faster Than REAL Time....

They appear to monitor actual bandwidth required as the compression varies over time, and "burst" extra data during the lulls to pre-fill the buffer. This is similar to the adaptive and cooperating audio / video codecs that we've talked about, where as audio requirements lessen, video gets more of the bandwidth. Additionally, when the user is paused, they continue to stream to pre-fill the buffer. They claim to monitor per-client bandwidth in real-time and to reconfigure themselves (and the network?) based on that data.

Would be interesting to get a copy to evaluate.

-----Original Message-----
From: Bill Schiefelbein (Exchange)
Sent: Saturday, September 11, 1999 12:49 PM
To: Anthony Bay (Exchange); Tom Honeybone (Exchange); Amir Majidimehr (Exchange); Bret O'Rourke (Exchange); Mike Beckerman (Exchange); Craig Eisler (Exchange)
Subject: RE: Faster Than REAL Time....

I'm not connected at the moment so I can't look into their site, but reading the attached doc, I was certainly less than enthused with their first selling point:

- Burstware optimizes network resources by delivering data in Faster-Than-Real-Time™ bursts that are stored in a client-side buffer, freeing up the network to serve other clients

Excuse me?? So if I send a 25Kbps piece of content down a 28.8 modem connection at 500Kbps I'm all set. I'll take a gander at their site to see if there is anything more interesting, but the rest of the bullets in the attachment were equally disappointing (though I'm impressed if they really got the trademark for "Faster-Than-Real-Time" :)

Bill

-----Original Message-----
From: Anthony Bay (Exchange)
Sent: Tuesday, September 07, 1999 10:02 AM
To: Tom Honeybone (Exchange); Amir Majidimehr (Exchange); Bret O'Rourke (Exchange); Bill Schiefelbein (Exchange); Mike Beckerman (Exchange); Craig Eisler (Exchange)
Subject: FW: Faster Than REAL Time....

what do we know about these guys?

-----Original Message-----
From: Steve Ballmer
Sent: Tuesday, September 07, 1999 9:05 AM
To: Anthony Bay (Exchange); Will Poole
Subject: FW: Faster Than REAL Time....

Do we have relationship with burstware should we please respond to Patrick Wright I do not know him thanks

-----Original Message-----
From: Patrick Wright [mailto:patrick.wright@digitalcreators.com]
Sent: Sunday, August 01, 1999 2:23 PM
To: Steve Ballmer
Subject: Faster Than REAL Time....

Steve,
After meeting with you at e-commerce summit and chatting about Steaming I found something better than we spoke about..

Reguards,

Patrick Wright
pvgwright@home.com
patrick.wright@burst.com

For more information check out our website:
www.burst.com